# GOLD AND SILVER.

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BY RICHARD P. ROTHWELL.

#### INTRODUCTION.

The statistics of an industry which in a single year has added to the wealth of the nation in a permanent, indestructible form about \$100,000,000, and which within a quarter of a century has increased the supply of the world's standards of value nearly \$2,000,000,000, are worthy the careful study of legislators, statesmen, and political economists in every country. With a full appreciation of the vastness of the subject and of the importance of accuracy in statements of such far-reaching influence, it has been sought to render these statistics of the precious metal industry in the United States in the calendar year 1889 full and reliable, especially from the fact of the controlling influence which must necessarily be exerted by the United States as the producer of nearly 28 per cent of all the gold and 41 per cent of the world's entire output of silver. It has also been deemed essential to the usefulness of this report to include in it a discussion of the various conflicting statements of the production of gold and silver in previous years, both in the United States and in all other countries, and to point out as far as possible, from a careful study of the world's statistics, the causes for the great and rapid decline in the market value of silver in recent years and the probable future of that value. These are the most important questions in the precious metal industry, not only to a vast investment in this country, but as affecting the financial policy of the whole civilized world. It has seemed well, therefore, to devote much space to this subject and much study to the facts which census investigations have established.

The successful accomplishment of this investigation has been due to the earnest efforts of many assistants. The principal assistant, Mr. William Kent, has had charge of the work, and has given valuable assistance in the study of the literature of the statistics of gold and silver production. The important duties involved in the care of the finances of this investigation and the general administration of the office were confided to Mrs. Sophia Braeunlich, business manager of the Engineering and Mining Journal. Her devotion and great business ability have contributed largely to the success of the work.

The greatest attention has been devoted to tracing to its source the output of the metals, so that the importance not only of each state, but of each producing county of a state, may be recognized.

The importance attached to the labor statistics has been less than to that of production only because of the impossibility, from the very nature of the industry, of obtaining absolutely exact data on this subject. The fact that much of the gold and the greater part of the silver is now obtained from ores produced or treated for lead or copper, the labor statistics of which naturally come within the statistics of these metals, renders a just apportionment of the labor and capital employed in the production of each metal impossible where the statistics of all have not been collected by the same special agent. Nevertheless, the statistics showing the number of men and the capital employed in the production of the precious metals have received the most careful attention, and are believed to be accurate within narrow limits.

The number of gold and silver mining "claims" or "locations", commonly called "mines", in the United States is practically beyond computation. The names of nearly 100,000 of such claims or mines were received by the Census Office, but upon limiting the investigation to (1) producing mines, (2) mines working but not producing, (3) mines temporarily stopped, but which had produced or upon which the work done had established their value and which could properly be classed as mines, the list declined to perhaps 10,000, and upon tabulating only such mines as made returns of production or labor statistics the list was reduced to 6,004, which is still a very large number compared with the other mineral-producing mines in the United States. Of these final reports, 43 per cent in number were reported direct through correspondence; the balance was collected by agents in the field. It is confidently believed that with time and continuous effort the reports of probably 80 per cent of all the producing mines could be secured by correspondence. This, however, would still leave the necessity for employing agents in the field to collect the remaining 20 per cent.

The results of the census investigation of the precious metal industry in 1889 are summarized on the following page.

# MINERAL INDUSTRIES IN THE UNITED STATES.

#### PRODUCTION OF BULLION.

METALS.	Ounces,	United States coining value, (a)
Total		\$00, 283, 732
Gold	1, 500, 869 51, 354, 851	32, 886, 744 66, 306, 988

a Coining value of 1 ounce of fine gold, \$20.0721+; coining value of 1 ounce of fine silver, \$1.2020+.

#### NUMBER OF EMPLOYES, AVERAGE WAGES PAID, AND AVERAGE NUMBER OF DAYS EMPLOYED PER YEAR.

employés.	Number employed.	Average wages per day.	A verage number of days em- ployed per year.	Average wages per year,
Grand total	57, 307	The state of the s		**************************************
Above ground:				
Foremen or overseers	1, 585	\$4.04	216	\$873
Mechanics	3, 273	3, 67	244	895
Laborers	17, 085	2, 61	195	480
Boys under 16 years of age	82	1,10	109	231
Total	22, 025		**********	****
Below ground:	a professional services of the contract of the	The Capped Section of the Section of	to represent to the company	arran na sa
Foremen or overseers	1, 352	4,16	238	990
Miners	29, 144	3, 12	236	736
Laborers	8, 870	2,46	244	600
Boys under 16 years of age	43	1.51	208	314
Total	34, 400			
Office force	878		1979	

#### Average output per person employed per annum, \$1,732; average earnings, \$729.

Total wages paid in 1889.	990 OTL ALD
Paid to contractors.  Paid to office force.	1, 421, 801
Total	
Value of supplies	18, 817, 739
Other expenditures	

VALUE OF MINING PLANT.	
Buildings	\$7, 565, 918
Railroads on surface	1, 475, 674
Machinery	14, 985, 215
Underground improvements	95, 806, 648
Mine supplies	084 010 8
Cash	7 110 810
Estimated value of mines, exclusive of the above items	338, 094, 821

		part 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
Potal value of mining plant	 	 465, 960, 566

	VALUE OF MILLS AND REDUCTION	Y WORKS.
Buildings		\$5, 685, 562
Machinery		
Supplies		1, 220, 272
Total		20 369 7

#### MOTIVE POWER.

		, i to recover .
POWER.	Number,	Horse power,
Boilers	2, 084	78, 348
Engines	1,364	55, 122
Other motors	623	18, 821
Animals	3, 965	

#### RELATIVE IMPORTANCE OF PRODUCING MINES.

Λ	lines reported producing less than \$1,000 hours	NUMBER.
T	Tines reported producing less than \$1,000 bullion	1,610
ī	rom \$1,000 to \$10,000	1,408
_	τοπι φτο,000 το φου,000	127
	1011 \$50,000 10 \$100,000	Q#5
r	rom \$100,000 to \$250,000	3.07
F	rom \$250,000 to \$500,000	44
C	ver \$500,000	44
	Total	2 790
M	lines reported working but not producing bullion	1 000
A	lines reported idle	1,000
		1,266
	Total number of mines reported	6 001
	上	0,004

The details for the statistics thus summarized are given in the following pages in due sequence.

From these statistics it appears that the labor employed in the actual production of the precious metals is both extremely well paid and very productive—better paid and more productive, in fact, than in any other industry thus far (May, 1891) reported.

The average earnings of all persons employed at the gold and silver mines (57,307) was \$729 a year, while the average output per man amounted to \$1,732 a year. In the granite quarrying industry, according to the census report, the average value of the output per person employed in 1889 was \$648, and the average wages per annum \$431. In coal mining west of the Mississippi river the average value of output per person employed was \$675, and the average wages earned \$474.

The average earnings in the several classes of labor in 1889 and 1880 are compared in the following table. It should be stated that if miners and laborers under ground are classed together, as all classes of labor above ground are, the average wages earned under ground would be \$3.04 per day as compared with \$2.51 per day above ground.

Miners generally work on contract, so much per ton, per foot of drift, or per cubic yard, while laborers under ground are paid by the day, which accounts for the great difference between the earnings of the two classes. It is well known that the average day wages paid in mining throughout the western states have largely declined during the past 10 years, owing to the reduced cost of living and greater number of wage workers since railroads penetrated the mining districts.

AVERAGE RATE OF WAGES IN GOLD AND SILVER MINING AT THE ELEVENTH CENSUS COMPARED WITH THE TENTH CENSUS.

المهارية المراجعية المؤولات الأمارية المراجعية المراجعية المراجعية المراجعية المراجعية المراجعية المراجعية الم المراجعية المراجعية			ELEVEN	TH CENSUS.			TENTH	CENSUB.
STATES AND TERRITORIES.		bove grou	nd.	Ве	low grou	ad.		
	Foremen.	Mechan- ics.	Laborers.	Foremen.	Miners.	Laborers.	Foremen.	Miners
The United States	\$4.04	\$3.67	\$2.51	\$4.16	\$3.12	<b>\$2.46</b>	******	
Alabama	3.00	1.50	0.90	3.00	1, 25	0, 83	\$1.00	<b>\$</b> 1. 00
Alaska	5.50	5, 00	2.82	4.86	3.60	2,00		ស្រីក ពី ការប្រភពនា
Arizona	4.59	3, 89	2.46	4.44	3, 17	2.24	5.00	4, 60
California	3.30	3, 26	2.05	3, 49	2.74	2, 28	5.00	2, 25
Colorado	4.33	3.80	2.91	4. 22	3.08	2.88	5.00	3,60
Dakota	4, 57	3, 23	2, 85	4.75	3.49	2.99	5, 50	3, 50
Georgia	1.33	1.47	0.92	1.60	1.05	0.80	2.00	1.00
Idaho	4, 64	4.04	3.04	4.79	3, 59	3. 10	5, 60	4.00
Maine							2.00	1.50
Maryland	2, 25		1.05		1.50	1. 25		
Michigan	3. 25	2.25	1,81	2. 25	2.00	1.86	******	
Montana	5.39	4.14	3.25	5. 11	3.48	3, 13	5. 00	3.50
Nevada	5. 07	4.56	3, 22	4.83	3.60	2.91	6. 50	4.60
New Hampshire					إديابا بالمالية أويد		3. 00	1.50
New Mexico	4, 09	3, 50	2.31	4. 15	3. 15	2.26	4.50	2.75
North Carolina	2.27	1,44	0.88	2.26	1.02	0.85	2, 60	1.00
Oregon	3.32	2, 92	2. 29	3.92	3. 16	2.23	4.00	3.66
South Carolina	3.02	2.54	0.99	3. 10	1.15	0.90	•••••••	
Texas	4.62	2.83	2.07	2.60	1.27	1.25		ومرجع مراجعاتها
Utah	5, 27	3.93	3. 14	4.21	2.04	2.80	5. 60	3.25
Virginia	1.38	<b>,</b>	1.00				1. 25	1.25
Washington	5. 00	4.00	3.00	4.69	3. 43	3.28		2.50
Wyoming	3, 86	3, 07	2.36	4.84	3. 05	2.26	4.00	3.60

#### STATISTICAL METHODS.

The collection of statistics respecting the production of gold and silver is a work of great difficulty. Gold is produced in extremely small quantities by a vast number of independent miners, often from remote and almost inaccessible sources. An army of prospectors is scattered over the mountains of the western states and territories every year, who explore every cañon and river bottom by digging and panning, and when "pay gravel" is found will remain working it until the gold or water supply fails or the frosts of winter drive them back toward the abodes of civilization. Gold dust thus found is carried from time to time to the nearest store or village, where it is bartered for supplies, or it is taken to the nearest United States assay office and sold for coin. The prospector, as a rule, carefully conceals the source from which his gold came, fearing lest others might interfere with his "claim", to which he may expect to return and work year after year; though the prospector does not generally return to his old diggings, for he has an ineradicable belief that somewhere else than "here where it requires so much labor for so little gold", somewhere "across the range" or in some still more desolate cañon, the bonauza awaits him which will realize his dream of millions and reward him for all the hardships and dangers he has undergone.

The prospector scorns to work for day wages. The mirage of millions is always before his eyes, and he patiently, cheerfully, and bravely undergoes untold privations and hardship year after year which no mere stipulated reward would induce him to endure, while the value of the gold he actually obtains does not amount to even very modest wages, and frequently does not pay for the scanty provisions with which he supplements the game he shoots. The storekeeper frequently furnishes him the provisions, or, as he terms it, a "grub stake", for an interest in the "finds" he may make.

While the average annual production of each of these prospectors or miners is small, the aggregate amount's considerable; but no full or accurate statistics of this portion of gold production can be obtained. It is frequently impossible to find the prospectors and men who work small mines, or, when found, to get any reliable information from them. They sometimes can not tell how much gold they have produced during the preceding year, the days they worked, the cost of anything, or the value of the mine itself.

Gold is mainly produced by a few large accessible mines, from which it is easy to get statistical information; but the cost of production at such mines would not fairly represent that at small mines or by prospectors.

Since the state of California has practically prohibited hydraulic mining by forbidding the washing of any débris into the streams, the yield of gold has greatly diminished; it has declined for more, in fact, than the entire value of the agricultural lands of the state which could possibly be affected by the débris. It is true that some surreptitious gravel mining is still carried on in the mountains, but from the fact that it is illegal it is impossible to obtain reliable statistics concerning it.

Notwithstanding these many difficulties, which render the collection of full statistics of gold more difficult than those of any other mineral product, it is nevertheless true that the mere total production of the metal can be ascertained with considerable accuracy and ease, since nearly all the gold produced finds its way either to the United States mint or to a few private refineries who supply fine bars.

The director of the United States mint has for some years collected and published an annual report giving the total production of gold in the United States, computed from the deposits at the various mints and United States assay offices and from reports furnished by the private refineries, and from returns by producing properties, the whole checked by the disposition of the products. This report, of course, gives none of the important statistics of labor, supplies, value of mines and improvements, etc., which it was the object of the census investigation to secure; and even where the mint report attempts to distribute the product according to states and counties, still more whereit assumes to give the output of individual mines, its figures are manifestly less reliable than required by a careful census of the mines, for while nearly all the gold finds its way to the mint the statistics relating to its production on be accurately obtained only by infinite labor and minute investigation.

The same is true in a less degree of the statistics of silver. This metal is now mainly produced in large mills or metallurgical establishments, which are quite willing to furnish the necessary statistics; but a much smaller proportion of the total silver than of the gold output goes through the mint, and a much larger proportion of the goes directly from the producer into commerce; consequently the figures of total production of silver as given in the mint report are less accurate than those of gold.

The mint reports are extremely valuable, and great credit is due to the director for the promptness with which this important statement of gold and silver production is published each year, and which would be greatly delayed if the work of collecting full statistics were undertaken.

The report on precious metals in volume XIII of the Tenth Census included elaborate reports of a technical character, among which were "A geological sketch of the states and territories of the Pacific division", by Mr. George F. Becker; "A sketch of the Rocky mountain division", by Mr. S. F. Emmons; "The mining industries of Utah", by Mr. D. B. Huntley; "The minting of gold and silver", by Mr. Albert Williams, jr., and "Lead smelting at Leadville, Colorado", by Mr. S. F. Emmons. It also included several minor sketches and reports on the mining and metallurgical methods adopted in the various districts, and various geological and technological data, together with statistical tables, such as the production of ore and bullion, rates of wages, etc.

The collection of statistics for the Eleventh Census is confined to ascertaining, first, the total production of gold and silver in the United States, showing the amount produced in each state and county; and, second, the importance of the industry as measured by (1) the number of persons it supports, (2) the wages earned by those engaged in the industry, and (3) the value of the mines and mining plant.

To furnish data for a correct understanding of the peculiar difficulties under which any census of the gold and silver industry must be conducted, as well as to show the extensive scope of the work undertaken by the census of 1880 and the methods used in it, and the reasons for curtailing that scope and adopting another method for the Eleventh Census, the following extract from the introduction of volume XIII of the Tenth Census is herein presented:

In undertaking the investigation of the statistics and technology of the precious metal industry of the United States, it was the object of those in charge of the work to make not only a more accurate statistical estimate of the actual product of the precious metals than had hitherto been made, but also to obtain such technical data as to the various processes by which these metals are reduced from their ores as would serve to show the actual condition of the industry, the advances it has made as compared with former periods, and its relative perfection and imperfection as compared with similar industries in other countries.

METHODS EMPLOYED.—In considering, at the outset, the best practical method by which such an investigation could be carried on, it was found that no information could be drawn from the experience of former American studies, inasmuch as no such far-reaching and detailed examination of this industry had ever been attempted in this or any other country, at least as far as could be learned. It was well known, however, to all who took part in making the original plans that precious metal mining and its allied labors presented peculiar obstacles to carrying out such a work, far greater than obtain in other industrial branches, from the fact that it is carried on in regions remote and difficult of access; that its business methods are relatively unsystematic, and that it is often of such a nature as to render those engaged in it extremely unwilling to have their transactions known to the world.

It was evident beforehand that the ordinary system of obtaining statistical information by sending circulars or lists of questions to be answered to all persons in charge of mining operations throughout the country would be impracticable, first, because there were no certain means of obtaining their addresses, and, second, because it was probable that, either through ignorance or unwillingness, a large proportion of the questions would be either imperfectly answered or entirely neglected, and it would be impossible to have any check on the completeness or accuracy of the answers obtained.

The plan finally adopted, therefore, was that of sending to every mine or reduction works in the country men of technical training and familiarity with the subject, to gather the necessary information personally, and assure themselves by local observation of the accuracy of the information obtained.

To aid these examiners a series of questions, arranged in schedules for each branch of mining and reduction process, was prepared after long and careful consideration, which should cover as far as possible all points of inquiry and also furnish checks on the accuracy of data given, intending thus to supplement any shortcoming in technical knowledge on the part of the expert and to systematize the data which he might send so as to facilitate the work of the compiler.

To carry out such a plan to theoretically perfect completion four requisites were necessary: an amount of time and of money disproportionate to the value of the results to be hoped for, a sufficient number of men both theoretically and practically familiar with all branches of the industry to act as experts, and a uniform willingness and ability on the part of those applied to to furnish the desired information.

In point of fact, however, after the work had been some time under way it was found that both the time and the money which could be allotted to this branch were inadequate to carry it through with the perfection aimed at; that it was impossible to find the number of men required who were in every respect fitted for it by education and experience, and that among owners and superintendents of mines and reduction works, while with a very few unimportant exceptions the greatest willingness was shown to grant us all the information they possessed, it was often found that they were themselves unable to answer the questions we asked, either through want of system in keeping records or because they had never thought of the importance or bearing of certain facts.

REASONS FOR INCOMPLETENESS.—The reasons for incompleteness in the results may be thus enumerated:

1. From want of previous experience the agents in charge could not distribute equally the ground to be covered among the experts employed, since the number of mines to be investigated bore no necessary relation to geographical area. As a consequence, toward the end of the time devoted to the investigation some regions received less attention than their relative importance merited.

2. The relative ability of the experts employed was necessarily unknown to the agents in charge until the investigation had proceeded so far that it was too late to make any radical change.

3. It was a practical impossibility to secure uniformity of ability and methods among so large a corps of experts as was necessary for the work. The result was that one would give more attention to one class of facts, another to another class, and when totals were made up from the schedule returns it was found that these facts were more complete in one region than in another.

As regards the best method for conducting such an investigation, the experience gained in this study would seem to teach that, while that employed here would produce the most perfect results under very favorable conditions, these conditions might demand an impracticably large expenditure of time and money. They would require a larger corps of experts, who should be specialists and receive adequate salaries, and be employed for a long enough time to become thoroughly familiar with their work before the investigation was undertaken. This could be best accomplished by making the investigation a permanent one. The results to be obtained by simple untrained enumerators, or from circulars sent without means of checking the results obtained by technical men, will necessarily prove so unreliable in the mining industry as to be of little value. Should the intermittent or decennial method still prevail a compromise between the two could be advantageously made by having untrained men go over the country rapidly and collect a few main figures for the statistical tables, and a smaller corps of thoroughly trained specialists make investigation of a few typical mines or reduction works in the various branches of the industry.

Leaving out of consideration the especial difficulties met with in the census of 1880, due to the attempt made to collect technological data as well as purely statistical information concerning production, wages, etc., great obstacles were found in collecting even the statistics of bullion production alone, and much of the product had to be estimated. The following extracts from the report of the Tenth Census (1880) show the difficulties then experienced in collecting statistics of production. The same difficulties were encountered to some extent in the present census

of 1890, though, thanks to the work performed annually by the mint, the production returns are now much more willingly furnished than they were in 1880.

Three principal methods have been adopted by statisticians in studying the bullion production of the United States.

The first and most obvious plan has been to use as a basis the receipts of domestic bullion reported by the several mints and United States assay offices, ascertaining the probable total product by adding to the figures thus obtained the amount shipped abroad, as shown by the customhouse returns, and the probable amount consumed in the arts. The objections to this method are: The amount coined within a certain period does not necessarily correspond to the production for that period. In the same way the proportion of the domestic product exported may be largely affected by the stock of precious metals on hand at any given time. Both of these variations depend primarily upon fluctuations in the bullion market and international balance of trade. An average of a long series of years would give tolerably accurate results, but for any stated period the figures of coinage, export, and consumption in the arts are apt to be deceptive.

Assuming the source of the bullion deposited at the mints to be correctly stated, there are still serious and unavoidable defects in the customhouse statistics, notwithstanding the care taken to secure accuracy. No account is taken of bullion transported overland into Canada, nor are the export figures for dor6 bullion, base bullion, ores, and matte shipped abroad always to be depended upon. \* \*\*\*

The best results which can be hoped for from the most careful application of the "consumption and export" method are close approximations extending over considerable periods, but not the exact product for any given year. The system also fails to segregate the yield according to the productive source; and while the geographical distribution by state and territorial lines may be shown, it is hardly possible to carry the analysis further and ascertain in this way the yield of single districts or even counties.

The second or "transportation" method consists in estimating the product from the statistics of the express companies, freight lines, and banks which have the handling of the product from its original sources. This plan would give more satisfactory results in the first place, all the bullion, ores, etc., were transported from the producing points through these different channels alone, and if, in the second place, none of the product were reshipped from point to point and thus twice recorded. As a matter of fact, there is considerable portion of the gold yield sent through the mails as registered matter, and a large proportion passes from the productive source into the market through private channels. \* \* \* But the impossibility of assigning to other channels the due proportion of the outflow through them; the fact that no record is made of the value of the gold bullion and dust sent through the mails; that no reliable allowance can be made for the undervaluation of gold dust and unassayed bullion by consignors, amounting in many cases to from to per cent; that there is no satisfactory means of checking the reshipments which are twice or more times recorded, combine to create a large margin which can hardly be definitely accounted for in making the total estimates. \* \* \*

The third system is one which, were it practicable to pursue it into complete details, would lead to results more satisfactory than could be obtained in any other way. This may be termed the direct method. It would consist, if properly carried ont, in obtaining from each bullion producer a statement of the quota contributed. The aggregate of the details thus reached would represent the actual total product of the country and would, moreover, segregate it according to districts.

The chief obstacles encountered in the collection of bullion statistics directly from the producers were:

First. The wide extent of the field to be covered and the vast number of mines to be reported upon. Even were the mines located in easily accessible places, the wide range of territory over which they are scattered would render the labor of personally visiting each productive district a tedious matter; but when it is considered that they are for the most part to be found in rugged, mountainous tracts, often at high altitudes, and, when destitute of railroad communication, to be reached only by stage or on horseback, somether may be gathered of the amount of work involved.

Second. The fact that a considerable yield is derived from small mines, the product from each of which, however insignificant in itself, goes to form part of an important aggregate, and should not be neglected.

Third. The reluctance of some mine owners and superintendents to give a full account of their operations, notwithstanding the strictly confidential manner in which these individual statements have been treated. \* \* \*

Fourth. The fact that in a large majority of cases no systematic accounts are kept by mine owners, who were often unable to state from memory the precise output of their properties for a period which had clapsed some time before the inquiry was made.

Fifth. Many mines having changed hands during the census year, it was frequently impossible to obtain from the present holder a statement of the operations conducted prior to the change in ownership, or to communicate with the former owners if they had removed. \* \* \*

With means still loss adequate than were lately at command, the census authorities in 1870 found it impossible to trace the bullion product of the country at that time. The best results reached by the deputy marshals in certain instances hardly amounted to a moisty of the actual product as known through other sources of information. In the case of the census of 1880, even with greatly increased facilities, there were many gaps in the testimony which had to be filled out by estimates derived from other data than those collected directly by the experts. \* \* \*

In compiling the material at hand the following system was adopted: The returns given in the individual mine schedules were first abstracted and grouped into aggregates for districts. Information as to the operations of the different establishments being in many cases confidential, publication of the results begins with the district exhibits. These, again, are condensed into tables for counties, and finally into abstracts for whole states and territories. Where a marked discrepancy existed between the schedule returns and officing reliable data, the necessary additions were entered and the fact that they were estimates indicated. It is hardly necessary to remark that the schedules would show deficiencies rather than an excess as compared with correlative data. At the same time the schedules of reduction works were examined, and furnished a valuable check upon the figures derived from the mine reports. " " "

The collection of statistics of the precious metals in Colorado presents certain peculiar difficulties: First, from the fact that there are so many small mines which keep no accurate record of their production; second, because a very large proportion of its ores, being essentially heterogeneous in composition, have to be smelted, and are thus more difficult to trace than milling ores. The smelting ores are sold, it is true, mostly to smelters within the state, but the same mine often sells to different and widely separated works, and the smelters themselves buy ores in small lots from many mines, of which no separate record is kept. Moreover, the check furnished in the more western states over the total production by the express returns is here wanting, since, practically, the whole silver product is shipped east in lead bullion, of which the transportation companies keep no record. Nevertheless, owing to the almost uniform willingness which the more important mine owners, samplers, and smelters have shown to afford the data which they possessed, it is believed that the totals attained represent a very close approximation to the actual product of the state, and that the figures given are, on an average within 5 per cent of the true amount, although in districts as yet incompletely developed this percentage may be greater.

As it was found impossible to separate with any degree of approximation the amount of "bullion produced", which should be credited to individual districts in several counties, the division into districts has been abandoned in such instances. In the following tables the

amount and value of ore raised has been given to districts as far as was possible, the heading "scattered" including, in general, mines from which no direct information was obtained, but which had sold ore to samplers or smelters. The sign of "estimated" (\*) might be appended in many cases to amounts of bullion produced by counties, because these amounts were largely obtained by segregating returns of ore purchased by smelters and apportioning to each county the corresponding proportion of bullion produced from that ore; thus, while the relative amounts may be considered estimates, the total footings of the columns are compiled from comparatively accurate data. \* \*, \*

MONTANA.—It was evident that the figures of gold production deduced from the schedules were below the truth, since the mint returns report the gold production of Montana as a little over a million dollars in excess. As the mint figures are certainly below the truth, it was proper that this difference should be added, the only question being to what branch of mining it should be credited. Now, the census returns from placer and hydraulic mines were notoriously incomplete, since, owing to the lateness of the season, but few of their owners could be found; but it is well known that they form the most important element in the gold production of Montana. On the other hand, it was thought that returns had been obtained from practically all the mills and smelting works. Under these circumstances it was judged best to discard the census figures for hydraulic and placer mines altogether, and assume as their production the difference between the amount of gold produced, as determined by mill and smelters returns, and the total product obtained from mint returns.

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The difficulties of obtaining reliable statistics of gold and silver productions were somewhat increased at the Eleventh Census by the stricter limitation of time and money to be devoted to this branch of the census, but all have been largely overcome by adopting the method successfully used in collecting annual statistics of other minerals, which consists in sending circulars containing a list of questions to be answered to all persons in charge of the mining operations throughout the country, and later to supplement this work by the employment of subagents, who should personally verify the schedules and obtain statistics of those mines which had not made returns by mail. No complete list of all the gold and silver mines in the United States existed. Very imperfect lists of those in a few states were given in the reports of the director of the mint and of various state officials, but by using these and other sources of information as a starting point it was found possible to compile fairly accurate and complete lists of all mines of any importance.

The likelihood of the schedule questions relating to works and mines being unanswered or answered incorrectly would evidently be greatly reduced by making the number of these questions as few as possible, and making them so simple that there would be no difficulty in understanding them.

The plan adopted for obtaining a directory of the mines was as follows: A circular was sent to every postmaster, assessor, county clerk, and newspaper editor in each mining district, and to the superintendents of mines whose post-office addresses could be ascertained, inclosing to each such person a blank on which he was requested to write and return the names and post-office addresses of all mines in his immediate vicinity. By this means many thousand names of mines were obtained. A second circular was then sent to the superintendent of each of these mines, including blanks worded as follows:

Name of mine, ——; location, town or district, ——; kind of metal produced—gold, silver, copper, lead, etc., ——; name of resident superintendent, ——; post-office address of superintendent, ——; name of company or owner, ——; address of principal office of company or owner, ——; operated or not in 1889, ——.

A directory blank was also sent to each mine superintendent, requesting him to fill in the names and addresses of neighboring mines. With the returns received from this second series of circulars the provisional list of mines was corrected and enlarged, and by following up this system a fairly accurate and complete list of addresses and names was obtained. To the managers of these mines were mailed the schedules with questions relating to the production of each mine and reduction works. The form of the schedule is shown in the appendix.

Had unlimited time been allowed, unquestionably nearly all the important mines could have been reached and returns obtained from them in this simple and inexpensive manner, but there would always remain a certain number of mines unreported which would necessitate the personal visit of an agent to get the desired information. This was forescen, and without waiting to reach the limit obtainable by correspondence special agents were appointed from each mining state and territory, to whom were furnished lists of the mines which had made returns, as well as those which had not. These agents were instructed to visit the mines which had not reported and such as were not on the lists and have the schedules filled out and returned at the earliest possible date. In Colorado and California special subagents were appointed for each mining county, or in some cases for a group of counties. In some states one, two, or more subagents were appointed to collect the schedules, and after seeing that they were properly filled out to return them to the office in New York, where all the compiling and tabulating were done.

This dual method of collecting by mail and by personal visits has proved satisfactory. The number of schedules received by mail was 2,584; the number received through agents after personal visits was 3,420; total, 6,004. In other words, 43 per cent of all the mines and about 60 per cent of the total production and other statistics of gold and silver were obtained by correspondence.

As fast as the schedules were received at the office in New York they were examined and tabulated, first by post offices and districts, and then these were grouped into counties and states. The county and state totals only are given in this report.

# STATISTICS OF PRODUCTION OF PRECIOUS METALS IN THE UNITED STATES PRIOR TO 1889.

In collecting the statistics of precious metal production for the Eleventh Census, it has been considered essential to make a careful study of existing statistics of production for previous years for the purpose of determining the degree of credit to which those statistics are entitled, as well as to justify the acceptance of the figures which have been collected for this report. It has also been considered important that this report should furnish, with such commentas seemed needed to render available to other students, all the statistical information obtainable concerning the precious metal industry. With this object in view, the statistical statements published in the various mint and other government reports, and collected from other sources considered reliable, are given.

PRODUCTION OF GOLD AND SILVER IN THE UNITED STATES FROM 1792.
[The estimate for 1792-1873 is by Dr. R. W. Raymond, United States mining commissioner, and since by the director of the mint.]

H = value				at the second second	1	•	
YEARS.	Total.	. Gold.	Silver.	YEARS,	Total.	Gold.	Silver.
Total	\$2, 766, 152, 769	\$1,838,861,760	\$927, 291, 000	1800	\$63, 500, 000	\$59, 500, 000	\$10,000,000
			# 1 v	1807	65, 225, 000	51, 725, 000	18, 500, 000
April 2, 1792—July 31, 1834.	14, 000, 000	14, 000, 000	(a)	1808	60, 000, neo	48, 000, 000	12,000,000
July 81, 1834—Dec. 31, 1844.	7, 750, 000	7, 500, 000	250, 000	1869	61, 500, 000	49, 500, 000	12,000,000
1845	1, 058, 327	1, 008, 327	50, 000	1870	66, 000, 000	50, 000, 000	16,000,000
1846	1, 180, 357	1, 139, 357	50, 000	1871	66, 500, 000	43, 500, 000	23,000,000
1847	939, 085	880, 085	50, 0 <b>0</b> 0	1872	64, 750, 000	36, 000, 000	28,750,000
1848	10, 050, 000	10, 000, 000	50, 000	1873	71, 750, 000	36, 000, 000	35,750,004
1849	40, 050, 000	40, 000, 000	50, 000	3874	70, 800, 000	33, 500, 000	37, 800,000
1850	50, 050, 000	50, 000, 000	50, 000	1875	65, 100, 000	33, 400, 000	31,700,000
1851	55, 050, 000	55, 000, 000	50, 000	1870	78, 700, 000	30, 000, 000	38, 800, 000
1852	60, 050, 000	60, 000, 000	50, 000	1877	86, 700, 000	48, 000, 000	39, 800, 000
1853	65, 050, 000	65, 000, 000	50, 000	1878	96, 400, 600	51, 200, 000	45, 200, 000
1854	63, 050, 000	60,000,000	50, 000	1870	79, 700, 000	38, 000, 000	40, 800, 000
1855	55, 050, 000	55, 000, 000	50,000	1880	75, 200, 000	36, 000, 000	30, 200, 000
1856	55, 050, 000	55, 000, 000	50, 000	1881	77, 700, 000	34, 700, 000	43, 000, 000
1857	55, 050, 000	55, 000, 000	50,000	1882	79, 300, 000	32, 500, 000	46, 800, 000
1858	50, 500, 000	50, 000, 000	500, 000	1883	76, 400, 000	30, 000, 000	46,200,000
1859	50, 100, 000	50, 000, 000	100, 000	1884	70, 800, 000	30, 800, 000	48,800,000
1860	46, 150, 000	40,000,000	130,000	1885	83, 400, 000	31, 800, 000	51,000,000
1861	45, 000, 000	43, 000, 000	2, 000, 000	1880	86, 000, 000	35, 000, 000	51, 000, 000
1862	43, 700, 000	39, 200, 000	4, 500, 000	1887	86, 350, 000	33, 000, 000	68; 850; 000
1803	48, 500, 000	40, 000, 000	8,500,004	1888	92, 370, 000	39, 175, 000	69, 195, <b>00</b> 0
1864	57, 100, 000	46, 100, 000	11,000,000	1889 { mint	97, 440, 000	32, 800, 000	64, 648, 600
1865	64, 475, 000	58, 225, 000	11, 250, 000	1869 { сепана	00, 283, 732	32, 880, 744	00,890,988
					4.11	tion that that	no! nen! ade

a Insignificant.

The above figures, especially for the years prior to 1879, vary considerably in many cases from those published in earlier reports, the latter being made up from estimates made at the time and based upon returns which were often greatly exaggerated. Thus in the above table the total buildon production of 1866 is given as \$63,500,000, while the original report published in 1867 gave it at \$106,000,000.

The following table shows the earliest attempts in official reports to distribute the bullion product among the states and territories. Some of these totals have been greatly reduced in subsequent reports of the director of the mint, as is shown in the latest mint estimates, given herewith.

PRODUCTION OF GOLD AND SILVER IN THE UNITED STATES FROM 1866 TO 1876, INCLUSIVE.

STATES AND TERRI- TORIES.	1866.	1867.	1808.	1869,	1870.	1871,	1872.	1878.	1874.	1875.	1876.
Total	\$106, 000, 000	<b>\$75, 000, 000</b>	\$87,000,000	\$61, 500, 000	\$66, 000, 000	<b>\$60, 66</b> 3, 000	\$60, 940, 857	<b>\$71, 012, 523</b>	#72, 428, 200	<b>\$74,817,506</b>	\$85,250,
Arizona California Colorado Idaho Montana Novada	25, 000, 000 17, 000, 000 17, 000, 000 18, 000, 000 10, 000, 000	500, 000 25, 000, 000 2, 500, 000 6, 500, 000 12, 000, 000 20, 000, 000	500, 000 22, 000, 000 8, 250, 000 7, 000, 000 15, 000, 000	1,000,000 22,500,000 4,000,000 7,000,000 0,000,000	25, 000, 000 3, 675, 000 6, 000, 000 9, 100, 000	800, 000 20, 000, 000 4, 003, 000 5, 000, 000 8, 050, 000	025, 000 19, 049, 008 4, 001, 405 2, 695, 870 6, 008, 330	500, 000 18, 025, 722 4, 020, 263 2, 500, 000 5, 178, 047	487, 000 20, 300, 531 5, 188, 510 1, 880, 004 3, 844, 722	750, 000 17, 753, 151 5, 302, 810 1, 750, 000 3, 573, 000	
New Mexico Dregen and Wash- ington. Utah	8, 000, 000	500, 000 3, 000, 000	14, 000, 000 250, 000 4, 000, 000	14, 000, 000 500, 000 8, 000, 000	16, 000, 000 500, 000 3, 000, 000	22, 500, 000 500, 000 2, 500, 000 2, 300, 000	25, 548, 801 500, 000 2, 000, 000 2, 445, 284	85, 254, 507 500, 000 1, 585, 784 3, 778, 200	85, 452, 288 500, 000   763, 605   3, 911, 601	825, 000	
Wyoming	5, 000, 000	5, 000, 000	1, 000, 000	500, 000	100, 000 525, 000	100, 000	100, 000	50, 000 250, 000	100,000	500,000	
atest mint esti-	63, 500, 000	65, 225, 000	60, 000, 000	61, 500, 000	00, 000, 000	66, 500, 000	04, 750, 000	71, 750, 000	70, 800, 000	05, 100, 000	78, 700,
Gold	53, 500, 000 10, 000, 000	51, 725, 000 13, 500, 000	48, 000, 000 12, 000, 000	49, 59 <b>9</b> , 000 12, 000, 000	50, 000, 000 16, 000, 000	43, 500, 000 28, 000, 000	36, 000, 000 28, 750, 000	80, 000, 000 85, 750, 000	33, 500, 000 37, 300, 000	83, 400, 000 81, 700, 000	39, 900, 88, 800,

APPROXIMATE DISTRIBUTION OF THE GOLD PRODUCT, BY STATES AND TERRIFORIES, ESTIMATED BY THE DIRECTOR OF THE MINT.

(4)	1877.	1878.	1879.	1880.	1881.	1882.	1882.
Total	\$45, 100, 000	\$47, 226, 107	<b>\$38, 900, 000</b>	\$36, 000, 000	\$34, 700, 000	\$32,500,000	\$30,000,00
Alabama				*************		and the state of t	
Alaska				6,000	15,000	150, 000	300, 00
Arizona	300, 000	500, 000	800, 000	400,000	1. 060, 000	1, 965, 999	950, 00
California	- 20,000,000	15, 260, 679	17, 600, 000	17, 500, 000	18, 200, 000	16, 800, 000	14, 129, 60
Colorado	., .,,	3, 366, 404	3, 225, 000	3, 200, 000	3, 300, 000	3, 369, 099	4, 100, 00
Dakota	-, 000, 000	3, 000, 000	2, 420, 000	3, 600, 000	4, 000, 000	3, 300, 000	3, 200, 00
Georgia	200,000	100, 000	90, 000	120, 000	125, 000	250, 000	199, 00
Idaho	-,,	1, 150, 000	1, 200, 000	1, 980, 000	1, 760, 060	1.500,000	1, 400, 00
Michigan			******			*******	
Montana	.,,	2, 260, 511	2, 500, 000	2, 400, 000	2, 330, 600	2, 550, 600	1. 800, 00
Nevada	18, 000, 000	19, 546, 513	9, 000, 000	4, 800, 000	2. 250, 900	2, 000, 000	2, 520, 60
New Mexico	175,000	175, 000	125, 000	130, 000	185, 000	150, 000	280, 66
North Carolina	100,000	150, 000	90, 000	95, 000	115, 000	190, 000	167, 00
Oregon	1, 000, 000	1, 000, 000	1, 150, 000	1, 090, 000	1, 160, 600	820, 660	660,00
South Carolina				15,000	35, 000	25, 000	56, 50
Tennessee					5, 990	20,000	
Texas			• • • • • • • • • • • • • • • • • • • •				
Utah	350,000	392, 000	575, 000	210,000	145.000	190, 600	140, 60
Virginia	1			10,000	10,000	15, 000	1
Washington		300,000	75, 000	410,000	120, 606	120, 660	6, 80 80, 00
Wyoming		,		20,000	5. 000	5, 660	1
Other sources, not distributed (a)	25, 000	25, 000	50, 000	14,000		0, 1990	4, 00 17, 50
Latest mint estimate	46, 900, 000	51, 200, 000	38, 900, 000	36, 000, 000	34, 700, 000	32, 500, 600	39, 609, 69
	<u> </u>				1		
					1		co.
STATES AND TERRITORIES.	1884.	1885.	1886.	1887.	1888.	18	80.
STATES AND TERRITORIES.	1884.	1885.	1886.	1887.	1888.	Mint.	S9. Census.
STATES AND TERRITORIES.  Total	1884.	188 <b>5.</b> \$31, 801, 000	1886. \$34, 869, 000	1887. \$33, 126, 000	1888. \$33, 167, 500		Census.
Total				ATT THE REAL PROPERTY AND ADDRESS OF THE PARTY		Mint.	Census. \$32,880,74
Total				\$33, 126, 000		Mint.	Census. \$22,886,74 2,33
Total	\$30, 800, 000	\$31, 801, 000 300, 000	\$34, 869, 000 446, 000	\$33, 126, 000 675, 000	\$33, 167, 500 850, 000	Mint. \$32,967,000	Census. \$32, 886, 74 2, 33 994, 65
Total	\$30, 800, 000 200, 000 930, 000	\$31, 801, 000 300, 000 880, 000	\$34, 869, 000 	\$33, 126, 000 675, 000 830, 000	\$33, 167, 500	\$32,967,000 \$00,000 900,000	Census. \$32, 886, 74 2, 33 904, 65 910, 17
Total AlabamaAlaskaArizona	\$30, 800, 000 200, 000 930, 000 13, 600, 000	\$31, 801, 000 300, 000 880, 000 12, 700, 000	\$34, 869, 000 446, 000 1, 110, 000 14, 725, 000	\$33, 126, 000 675, 000 830, 000 13, 400, 000	\$33, 167, 500 850, 000 871, 500 12, 750, 000	900, 000 13, 000, 000	Census. \$32, 886, 74 2, 33 304, 65 910, 17 12, 586, 72
Total AlabamaAlaskaArizonaCaliforniaColorado	200, 000 930, 000 13, 600, 000 4, 250, 000	\$31, 801, 000 300, 000 880, 000 12, 700, 000 4, 200, 000	\$34, 869, 000 446, 000 1, 110, 000 14, 725, 000 4, 450, 000	\$33, 126, 000 675, 000 830, 000 13, 400, 000 4, 000, 000	\$33, 167, 500 850, 000 871, 500	900, 000 13, 000, 000 3, 500, 000	Census.  \$32, 886, 74  2, 33  \$94, 65  910, 17  12, 586, 72  2, 883, 85
Total Alabama Alaska Arizona California Colorado	\$30,800,000 200,000 930,000 13,600,000 4,250,000 3,300,000	\$31, 801, 000 300, 000 880, 000 12, 700, 000 4, 200, 000 3, 200, 000	\$34, 869, 000 446, 000 1, 110, 000 14, 725, 000 4, 450, 000 2, 700, 000	\$33, 126, 000 675, 000 830, 000 13, 400, 000 4, 000, 000 2, 400, 000	\$33, 167, 500 850, 000 871, 500 12, 750, 000 3, 758, 000 2, 600, 600	900, 000 900, 000 13, 000, 900 3, 500, 900 2, 900, 600	Census.  \$32. 886, 74  2, 33  904, 65  910, 17  12, 586, 72  2, 883, 85  3, 691, 13
Total	\$30, 800, 000 200, 000 930, 000 13, 600, 000 4, 250, 000 3, 300, 000 137, 000	\$31, 801, 000 300, 000 880, 000 12, 700, 000 4, 200, 000 3, 200, 000 136, 000	\$34, 869, 000 446, 000 1, 110, 000 14, 725, 000 4, 450, 000	\$33, 126, 000 675, 000 830, 000 13, 400, 000 4, 000, 000 2, 400, 000 110, 000	\$33, 167, 500 850, 000 871, 500 12, 750, 000 3, 758, 000 2, 600, 000 104, 000	900, 000 900, 000 13, 000, 000 2, 900, 000 107, 000	Census.  \$32, 886, 74  2, 33  904, 65  910, 17  12, 586, 72  3, 883, 85  3, 691, 13  187, 60
Total Alabama Alaska Arizona California Colorado Dakota Georgia	\$30,800,000 200,000 930,000 13,600,000 4,250,000 3,300,000	\$31, 801, 000 300, 000 880, 000 12, 700, 000 4, 200, 000 3, 200, 000	\$34, 869, 000 446, 000 1, 110, 000 14, 725, 000 4, 450, 000 2, 700, 000 152, 500	\$33, 126, 000 675, 000 830, 000 13, 400, 000 4, 000, 000 2, 400, 000 110, 000 1, 900, 000	\$33, 167, 500 850, 000 871, 500 12, 750, 000 3, 758, 000 2, 600, 000 104, 000 2, 400, 000	900, 000 900, 000 13,000, 000 1,500, 000 2,900, 000 167,000 2,000,000	Census.  \$32.886.74  2.33  \$94.65  910.17  12.586.72  3.863.85  3.091.13  107.60  1.984.15
Total Alabama Alaska Arizona California Colorado Dakota Georgia Idallo	\$30, 800, 000 200, 000 930, 000 13, 600, 000 4, 250, 000 137, 000 1, 250, 000	\$31, 801, 000 300, 000 880, 000 12, 700, 000 4, 200, 000 3, 200, 000 138, 000 1, 800, 000	\$34, 869, 000 446, 000 1, 110, 000 14, 725, 000 4, 450, 000 2, 700, 000 152, 500 1, 800, 000	\$33, 126, 000 675, 000 830, 000 13, 400, 000 4, 000, 000 2, 400, 000 110, 000 1, 900, 000 26, 000	\$33, 167, 500 850, 000 871, 500 12, 750, 000 3, 758, 000 2, 600, 000 104, 000 2, 400, 000 42, 000	\$32,967,000 900,000 900,000 13,000,000 2,900,000 167,000 2,000,000 70,000	Census.  \$32, 886, 74  2, 33  \$94, 65  910, 17  12, 586, 72  3, 883, 85  3, 691, 13  107, 60  1, 984, 15  87, 64
Total Alabama Alaska Arizona California Colorado Dakota Georgia Idalio Michigan Montana	\$30, 800, 000 200, 000 930, 000 13, 800, 000 4, 250, 000 137, 000 1, 250, 000 2, 170, 000	\$31, 801, 000 300, 000 880, 000 12, 700, 000 4, 200, 000 3, 200, 000 18, 000 1, 800, 000 3, 300, 000	\$34, 869, 000 446, 000 1, 110, 000 14, 725, 000 4, 450, 000 2, 700, 000 152, 500 1, 800, 000 4, 425, 000	\$33, 136, 000 675, 000 830, 000 13, 400, 000 4, 000, 000 2, 400, 000 110, 000 1, 900, 000 26, 000 5, 230, 000	\$33, 167, 500 \$50,000 \$71,500 12,750,000 3,758,000 2,600,000 104,000 2,400,000 42,000 4,200,000	\$32,967,000 900,000 900,000 13,000,000 3,500,000 167,000 2,000,000 70,000 3,500,600	Census.  \$32, 886, 74  2, 53  994, 65  910, 17  12, 586, 72  3, 883, 85  3, 691, 13  197, 66  1, 984, 15  87, 64  3, 139, 32
Total Alabama Alaska Arizona Colorado Dakota Georgia Idaho Michigan Montana	\$30, 800, 000 200, 000 930, 000 13, 800, 000 4, 250, 000 137, 000 1, 250, 000 2, 170, 000 3, 500, 000	\$31, 801, 000 300, 000 880, 000 12, 700, 000 4, 200, 000 136, 000 1, 800, 000 3, 300, 000 3, 100, 000	\$34, 869, 000 446, 000 1, 110, 000 14, 725, 000 4, 450, 000 2, 700, 000 152, 500 1, 800, 000 4, 425, 000 3, 090, 000	\$33, 136, 000 675, 000 830, 000 13, 400, 000 4, 000, 000 2, 400, 000 110, 000 1, 900, 000 26, 000 5, 230, 000 2, 500, 000	\$33, 167, 500 \$50,000 \$71,500 12,750,000 3,758,000 2,600,000 104,000 2,400,000 42,000 4,200,000 3,525,000	900, 000 900, 000 13, 000, 900 3, 500, 900 2, 900, 600 107, 000 2, 000, 000 70, 000 3, 500, 000 3, 500, 000	Census.  \$32, 886, 74  2, 33  904, 65  910, 17  12, 586, 72  3, 863, 85  3, 691, 13  1074, 615  87, 64  2, 139, 22  3, 590, 28
Total Alabama Alaska Arizona California Colorado Dakota Georgia Idalio Michigan Montana Nevada	\$30, 800, 000 200, 000 930, 000 13, 800, 000 4, 250, 000 137, 000 1, 250, 000 2, 170, 000 3, 500, 000 300, 000	\$31, 801, 000 300, 000 880, 000 12, 700, 000 4, 200, 000 138, 000 1, 800, 000 3, 300, 000 3, 100, 000 800, 000	\$34, 869, 000  446, 000 1, 110, 000 14, 725, 000 4, 450, 000 2, 700, 000 152, 500 1, 800, 000 4, 425, 000 3, 090, 000 400, 000	\$33, 126, 000  675, 000  830, 000  13, 400, 000  4, 000, 000  1, 900, 000  26, 000  5, 2311, 000  2, 500, 000  500, 000	\$33, 167, 500 850, 000 871, 500 12, 750, 000 3, 758, 000 2, 600, 000 104, 000 42, 000 42, 000 42, 000 42, 000 602, 000	\$32,967,000 \$00,000 900,000 13,000,000 3,500,000 2,900,000 107,000 2,000,000 70,000 3,500,600 3,000,000 1,000,000	Census.  \$32, 886, 74  2, 33  904, 65  910, 17  12, 586, 72  3, 883, 85  3, 691, 13  1, 97, 60  1, 984, 139, 22  3, 506, 29  815, 65
Total Alabama Alaska Arizona Colorado Dakota Georgia Idalio Michigan Montana Nevada New Mexico North Carolina	200, 000 930, 000 13, 600, 000 4, 250, 000 13, 300, 000 137, 000 1, 250, 000 2, 170, 000 3, 500, 000 300, 000 157, 000	\$31, 801, 000 300, 000 880, 000 12, 700, 000 4, 200, 000 138, 000 1, 800, 000 3, 300, 000 3, 100, 000 800, 000 152, 000	\$34, 869, 000  446, 000 1, 110, 000 14, 725, 000 4, 450, 000 2, 700, 000 152, 500 1, 800, 000 4, 425, 000 3, 090, 000 400, 000 175, 000	\$33, 136, 000  675, 000  830, 000  13, 400, 000  4, 000, 000  110, 000  1, 900, 000  26, 000  5, 230, 000  2, 500, 000  500, 000  225, 000	\$33, 167, 500 850, 000 871, 500 12, 750, 000 3, 758, 000 2, 600, 600 104, 000 42, 000 4, 200, 000 3, 525, 000 602, 000 136, 000	960, 060 900, 000 13, 000, 000 13, 500, 000 167, 000 70, 600 3, 500, 600 1, 000, 000 11, 000, 000 1, 000, 000 1, 000, 000	Census.  \$32, 886, 74  2, 33  904, 65  910, 17  12, 586, 72  2, 883, 85  3, 691, 13  197, 66  1, 984, 15  87, 64  3, 139, 32  3, 506, 26  815, 65  146, 79
Total Alabama Alaska Arizona California Colorado Dakota Georgia ddalto Michigan Montana Nevada New Mexico North Carolina Dregon	200, 000 930, 000 13, 600, 000 4, 250, 000 137, 000 1, 250, 000 2, 170, 000 3, 500, 000 157, 000 660, 000	\$31, 801, 000 300, 000 880, 000 12, 700, 000 4, 200, 000 138, 000 1, 800, 000 3, 300, 000 3, 100, 000 800, 000	\$34, 869, 000  446, 000 1, 110, 000 14, 725, 000 4, 450, 000 2, 700, 000 152, 500 1, 800, 000 4, 425, 000 3, 090, 000 400, 000	\$33, 126, 000  675, 000  830, 000  13, 400, 000  4, 000, 000  1, 900, 000  26, 000  5, 2311, 000  2, 500, 000  500, 000	\$33, 167, 500 850, 000 871, 500 12, 750, 000 3, 758, 000 2, 600, 000 104, 000 42, 000 42, 000 42, 000 42, 000 602, 000	\$32,967,000 \$00,000 900,000 13,000,000 3,500,000 2,900,000 107,000 2,000,000 70,000 3,500,600 3,000,000 1,000,000	Census. \$32, 886, 74 2, 33
Total Alabama Alaska Arizona California Colorado Dakota Georgia ddaluo Michigan Montana Nevada Now Mexico North Carolina Oregon South Carolina	200, 000 930, 000 13, 600, 000 4, 250, 000 13, 300, 000 137, 000 1, 250, 000 2, 170, 000 3, 500, 000 300, 000 157, 000	\$31, 801, 000 880, 000 12, 700, 000 4, 200, 000 138, 000 1, 800, 000 3, 300, 000 3, 100, 000 800, 000 800, 000	\$34, 869, 000  446, 000 1, 110, 000 14, 725, 000 4, 450, 000 2, 700, 000 152, 500 1, 800, 000 40, 000 175, 000 990, 000	\$33, 136, 000  675, 000  830, 000  13, 400, 000  4, 000, 000  110, 000  1, 900, 000  26, 000  5, 230, 000  2, 500, 000  225, 000  900, 000	\$33, 167, 500  850, 000 871, 500  12, 750, 000 3, 758, 000 2, 600, 600 104, 000 4, 200, 000 4, 200, 000 3, 525, 000 602, 000 136, 000 825, 000	900, 000 900, 000 13, 000, 000 13, 000, 000 2, 900, 000 167, 000 70, 000 3, 500, 000 1, 000, 000 1, 000, 000 1, 000, 000	Census.  \$32, 886, 74  2, 73  904, 65  910, 17  12, 586, 72  2, 883, 85  3, 691, 13  107, 60  1, 984, 15  87, 64  3, 139, 22  3, 596, 22  815, 65  146, 79  964, 30
Total Alabama Alaska Arizona California Colorado Dakota Georgia daluo Michigan Montana Nevada New Mexico North Carolina Oregon South Carolina Dennessee	200, 000 930, 000 13, 600, 000 4, 250, 000 137, 000 1, 250, 000 2, 170, 000 3, 500, 000 157, 000 660, 000	\$31, 801, 000 880, 000 12, 700, 000 4, 200, 000 138, 000 1, 800, 000 3, 300, 000 3, 100, 000 800, 000 800, 000	\$34, 869, 000  446, 000 1, 110, 000 14, 725, 000 4, 450, 000 2, 700, 000 152, 500 1, 800, 000 40, 000 175, 000 990, 000	\$33, 136, 000  675, 000  830, 000  13, 400, 000  4, 000, 000  110, 000  1, 900, 000  26, 000  5, 230, 000  2, 500, 000  225, 000  900, 000	\$33, 167, 500  850, 000 871, 500  12, 750, 000 3, 758, 000 2, 600, 600 104, 000 4, 200, 000 4, 200, 000 3, 525, 000 602, 000 136, 000 825, 000	900, 000 900, 000 13, 000, 000 13, 000, 000 2, 900, 000 167, 000 70, 000 3, 500, 000 1, 000, 000 1, 000, 000 1, 000, 000	Census.  \$32, 886, 74  2, 33  904, 65  910, 17  12, 566, 72  2, 883, 85  3, 691, 13  197, 60  1, 984, 15  87, 64  2, 139, 22  3, 504, 28  845, 65  144, 79  964, 38
Total Alabama Alaska Arizona California Colorado Dakota Georgia Idalio Michigan Montana Nevada New Mexico North Carolina Oregon South Carolina Tennessee Texas	\$30, 800, 000 200, 000 930, 000 13, 600, 000 4, 250, 000 137, 000 1, 250, 000 2, 170, 000 3, 500, 000 300, 000 157, 000 57, 000	\$31, 801, 000  300, 000 880, 000 12, 700, 000 4, 200, 000 136, 000 1, 800, 000 3, 100, 000 800, 000 152, 000 800, 000 43, 000	\$34, 869, 000  446, 000 1, 110, 000 14, 725, 000 4, 450, 000 2, 700, 000 152, 500 1, 800, 000 4, 425, 000 3, 090, 000 400, 000 175, 000 990, 000 37, 500	\$33, 136, 000  675, 000 830, 000 13, 400, 000 4, 000, 000 110, 000 1, 900, 000 26, 000 5, 230, 000 20, 500, 000 200, 000 500, 000 500, 000 50, 000	\$33, 167, 500  850, 000 871, 500  12, 750, 000 3, 758, 000 2, 600, 600 104, 000 4, 200, 000 4, 200, 000 3, 525, 000 602, 000 136, 000 825, 000	900, 000 900, 000 13, 000, 000 13, 000, 000 2, 900, 000 167, 000 70, 000 3, 500, 000 1, 000, 000 1, 000, 000 1, 000, 000	Census.  \$32, 886, 74  2, 73  904, 65  910, 17  12, 586, 72  2, 883, 85  3, 691, 13  107, 60  1, 984, 15  87, 64  3, 139, 22  3, 596, 22  815, 65  146, 79  964, 30
Total Alabama Alaska Arizona California Colorado Dakota Georgia Idalio Michigan Montana Nevada Nevada North Carolina Dregon South Carolina Pennessee Pexas Utah	\$30, 800, 000 200, 000 930, 000 13, 800, 000 4, 250, 000 137, 000 1, 250, 000 2, 170, 000 3, 500, 000 300, 000 157, 000 660, 000 57, 000	\$31, 801, 000 880, 000 12, 700, 000 4, 200, 000 138, 000 1, 800, 000 3, 300, 000 3, 100, 000 800, 000 800, 000	\$34, 869, 000  446, 000 1, 110, 000 14, 725, 000 4, 450, 000 2, 700, 000 152, 500 1, 800, 000 40, 000 175, 000 990, 000	\$33, 136, 000  675, 000  830, 000  13, 400, 000  4, 000, 000  110, 000  1, 900, 000  26, 000  5, 230, 000  2, 500, 000  225, 000  900, 000	\$33, 167, 500  850, 000 871, 500  12, 750, 000 3, 758, 000 2, 600, 000 104, 000 42, 000 4, 200, 000 602, 000 136, 000 825, 000 39, 000	\$32, 967, 000  900, 000  13, 000, 000  13, 500, 000  2, 900, 000  107, 000  2, 000, 000  1, 000, 000  1, 000, 000  1, 000, 000	Census.  \$32, 886, 74  2, 33  904, 65  910, 17  12, 586, 72  3, 883, 88  3, 691, 13  1, 984, 15  87, 64  2, 139, 22  3, 506, 26  846, 73  964, 38  46, 85
Total Alabama Alaska Arizona California Colorado Dakota Georgia Idalio Michigan Montana Nevada Newde North Carolina Oregon South Carolina Oregon South Carolina Pennessee Pexas Utah Virginia	\$30, 800, 000 200, 000 930, 000 13, 800, 000 4, 250, 000 1, 250, 000 1, 250, 000 3, 500, 000 300, 000 157, 000 660, 000 57, 000 120, 000 2, 000	\$31, 801, 000  300, 000 880, 000 12, 700, 000 4, 200, 000 136, 000 1, 800, 000 3, 100, 000 800, 000 152, 000 800, 000 43, 000	\$34, 869, 000  446, 000 1, 110, 000 14, 725, 000 4, 450, 000 2, 700, 000 152, 500 1, 800, 000 40, 000 175, 000 990, 000 37, 500	\$33, 126, 000  675, 000  830, 000  13, 400, 000  4, 000, 000  1, 900, 000  26, 000  5, 231, 000  2, 500, 000  500, 000  500, 000  50, 000  2220, 000	\$33, 167, 500  850, 000 871, 500 12, 750, 000 3, 758, 000 2, 600, 000 104, 000 42, 000 42, 000 42, 000 136, 000 825, 000 39, 000	900, 000 900, 000 13, 000, 000 13, 000, 000 2, 900, 000 70, 000 3, 500, 000 3, 500, 000 1, 000, 000 1, 000, 000 1, 000, 000	Census.  \$32, 886, 74  2, 33  904, 65  910, 17  12, 586, 72  3, 883, 86  3, 691, 13  107, 61  2, 139, 22  2, 506, 28  846, 75  446, 75  487, 66  4, 10
Total Alabama Alaska Azizona California Colorado Dakota Georgia Idalio Michigan Montana Nevada New Mexico North Carolina Oregon South Carolina Pennessee Pexas Utah Virginia Washington	\$30, 800, 000 200, 000 930, 000 13, 600, 000 4, 250, 000 137, 000 1, 250, 000 2, 170, 000 30, 500, 000 157, 000 660, 000 57, 000 120, 000 2, 000 85, 000	\$31, 801, 000  300, 000 880, 000 12, 700, 000 4, 200, 000 136, 000 1, 800, 000 3, 100, 000 800, 000 152, 000 800, 000 43, 000	\$34, 869, 000  446, 000 1, 110, 000 14, 725, 000 4, 450, 000 2, 700, 000 152, 500 1, 800, 000 4, 425, 000 3, 090, 000 400, 000 175, 000 990, 000 37, 500	\$33, 136, 000  675, 000 830, 000 13, 400, 000 4, 000, 000 110, 000 1, 900, 000 26, 000 5, 230, 000 20, 500, 000 200, 000 500, 000 500, 000 50, 000	\$33, 167, 500  850, 000 871, 500  12, 750, 000 3, 758, 000 2, 600, 000 104, 000 42, 000 4, 200, 000 602, 000 136, 000 825, 000 39, 000	\$32, 967, 000  900, 000  13, 000, 000  13, 500, 000  2, 900, 000  107, 000  2, 000, 000  1, 000, 000  1, 000, 000  1, 000, 000	Census.  \$32, 886, 74  2, 33  \$94, 65  \$10, 17  12, 586, 72  3, 883, 85  3, 691, 13  197, 60  1, 984, 15  \$7, 64  3, 139, 32  3, 560, 39  \$46, 85  487, 66  4, 10  186, 15
Total Alabama Alaska Arizona California Colorado Dakota Georgia Idalio Michigan Montana Nevada New Mexico North Carolina Oregon South Carolina Tennessee	\$30, 800, 000 200, 000 930, 000 13, 800, 000 4, 250, 000 1, 250, 000 1, 250, 000 3, 500, 000 300, 000 157, 000 660, 000 57, 000 120, 000 2, 000	\$31, 801, 000  300, 000 880, 000 12, 700, 000 4, 200, 000 136, 000 1, 800, 000 3, 100, 000 800, 000 152, 000 800, 000 43, 000	\$34, 869, 000  446, 000 1, 110, 000 14, 725, 000 4, 450, 000 2, 700, 000 152, 500 1, 800, 000 40, 000 175, 000 990, 000 37, 500	\$33, 126, 000  675, 000  830, 000  13, 400, 000  4, 000, 000  1, 900, 000  26, 000  5, 231, 000  2, 500, 000  500, 000  500, 000  50, 000  2220, 000	\$33, 167, 500  850, 000 871, 500 12, 750, 000 3, 758, 000 2, 600, 000 104, 000 42, 000 42, 000 42, 000 136, 000 825, 000 39, 000	900, 000 900, 000 13, 000, 000 13, 000, 000 2, 900, 000 70, 000 3, 500, 000 3, 500, 000 1, 000, 000 1, 000, 000 1, 000, 000	Census.  \$32, 886, 74  2, 33  904, 65  910, 17  12, 586, 72  3, 883, 85  3, 691, 13  167, 60  1, 984, 15  87, 64  2, 139, 22  2, 506, 28  845, 65  144, 79  46, 85

 $<sup>\</sup>alpha$  In some years this is stated to include Alabama, Michigan, Tennessee, Texas, Vermont, Virginia, and Wyoming.

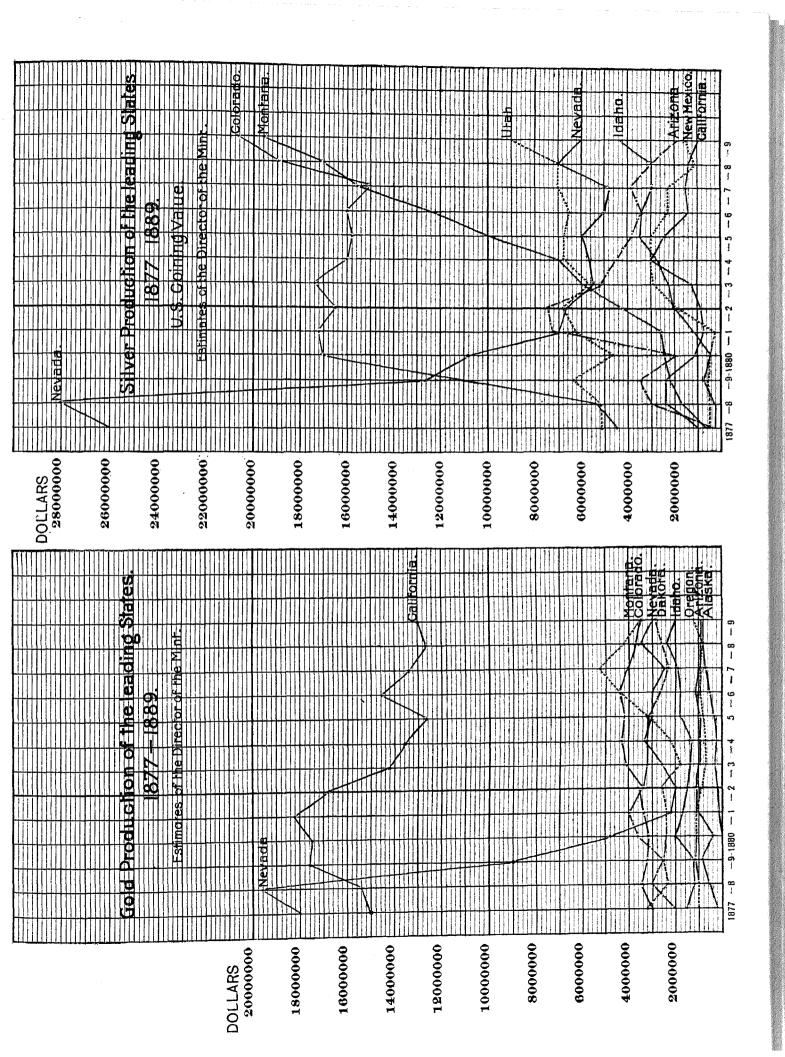
# APPROXIMATE DISTRIBUTION OF THE SILVER PRODUCT, BY STATES AND TERRITORIES, ESTIMATED BY THE DIRECTOR OF THE MINT.

[United States coining value.]

STATES AND TERRITORIES.	1877,	1878.	1879,	1880.	1881.	1882.	1883.
Total	\$38, 950, 000	\$40, 726, 814	\$40, 812, 000	\$38, 200, 000	\$43, 000, 000 :	\$46, 800, 000	\$46, 200, 0
		p. •	.	!	· · · · · · · · · · · · · · · · · · ·		1970, 400, 0
Alabama							
Alaska		6 000 000 1			• • • • • • • • • • • • • • • • • • •		
Arizona	500, 000	3, 000, 000	3, 550, 000 !		7, 300, 000	. 7, 500, 000 j	5, 200, (
California	1, 000, 000	2, 373, 389	2, 400, 000	1, 100, 000	750, 000	845,000	1,460,0
Colorado	4, 500, 000	5, 304, 940	11, 700, 000	17, 000, 000	17, 160, 000	16, 500, oap	17, 370, 1
Dakota	. <b></b>		10, 000	70, 000	70, 000	175, 000	150,0
Georgia	. <b></b>					: 	1,0
(daho	250,000	200, 000	650, 000	450, 000	1, 300, poo	2,000,000	2, 100, (
Maine		*****************			5,000 1.		-, 100, (
Michigan	200, 000	100,000	780, 000				
Montana	750, 000	1, 669, 635	2, 225, 000	2, 500, 000	2, 630, 000	4, 370, 000	0.000
Nevada	20, 000, 000	28, 180, 350	12, 500, 000	10, 000, 000	7, 080, 000	ff, 750, 000 ;	0,000,0
New Mexico	500, 000	500,000	600, 900	425, 000		1	5, 480, 0
North Carolina	17014 0170	800,000	i in i	-1211, 000	275, 000	1, 800, 000	2, 845,
1	120 000	Lan AAF	na nan I			25, 000	8,1
)regon	100,000	100, 000	20,000	15, 000	50, 000	35, 000	20, 1
South Carolina							. (
Pexas		•••••••••••••••••••••••••••••••••••••••	•••••	****************			
Itah	5, 075, 000	5, 208, 000	6, 250, 000	4, 740, 900	6, 400, 000	6, 800, 000	5, 620,
Virginia							**********
Washington	50,000	25, 000	20,000				
Other sources, not distributed (a)	25, 000	25, 000	47,000				• • • • • • • • • • • • • •
Latest mint estimate	80, 800, 000	45, 200, 000	40, 800, 000	39, 200, 000	43, 000, 000	46, 800, 000	. 46, 200,
			n was being	was a rain or rail			
, , , , , , , , , , , , , , , , , , , ,	i	1				188	6
	4.004				11	.1 000	47,
STATES AND TERRITORIES.	1884.	1885.	1886.	1887.	1888.		
STATES AND TERRITORIES,	1884.	1885.	1886.	1887.	1888.	Mint.	Consus,
STATES AND TERRITORIES,  Total	\$48, 800 <b>,</b> 000	1886. \$51, 600, 000	1886. \$51,821,500	1887. \$50, 941, 800	1888. \$59, 200, 700		
Total						Mint.	Consus. \$66, 396,
Total	\$48, 800 <b>,</b> 000	\$51, 600, O00	\$51,821,500	<b>\$</b> 50, 941, 800	\$50 <b>,</b> 200, 700	Mint. \$64, 768, 780	Consus. \$66, 306,
Total	\$48, 800, 000	\$51, 600, 600 2, 000	\$51, 821, 500 2, 000	\$50,941,800 800	\$59, 200, 700 3, 000	Mint. \$64, 768, 780	Consus. \$66, 396,
Total	\$48, 800, 000 4, 500, 000	\$51, 600, 600 2, 000 3, 800, 000	\$51, 821, 500 2, 000 3, 400, 000	\$50, 941, 800 800 3, 800, 000	\$50, 200, 700 3, 000 3, 000, 000	Mint. \$64, 768, 780	Consus. \$66,396,
Total	\$48, 800, 000 4, 500, 000 3, 000, 000	\$51, 600, 600 2, 600 3, 800, 600 2, 500, 600	\$51, 821, 500 2, 000 3, 400, 000 1, 400, 000	\$50, 941, 800 800 3, 800, 000 1, 500, 000	\$50, 200, 700 3, 000 3, 000, 000 1, 400, 000	Mint. \$64, 768, 780	Consus. \$66,396,
Total	4, 500, 000 3, 000, 000 16, 000, 000	\$51, 600, 600 2, 600 3, 800, 600 2, 500, 600 15, 800, 600	\$51, 821, 500 2, 000 3, 400, 000	\$50, 941, 800 800 3, 800, 000	\$50, 200, 700 3, 000 3, 000, 000	Mint. \$64, 768, 780	Consus. \$66, 396,
Total	\$48, 800, 000 4, 500, 000 3, 000, 000	\$51, 600, 600 2, 600 3, 800, 600 2, 500, 600	\$51, 821, 500 2, 000 3, 400, 000 1, 400, 000	\$50, 941, 800 800 3, 800, 000 1, 500, 000	\$50, 200, 700 3, 000 3, 000, 000 1, 400, 000	Mint. \$64, 768, 780 10, 848 1, 939, 303 1, 034, 348	Consus.  \$66,306,  11, 2,343, 1,878, 28,767,
Total	4, 500, 000 3, 000, 000 16, 000, 000	\$51, 600, 600 2, 600 3, 800, 600 2, 500, 600 15, 800, 600	\$51, 821, 500 2, 000 3, 400, 000 1, 400, 000 16, 000, 000	\$50, 941, 800 800 3, 800, 000 1, 500, 000 15, 000, 000	\$50, 200, 700 3, 000 3, 000, 000 1, 400, 000 10, 000, 000	Mint. \$64, 768, 780 10, 848 1, 899, 903 1, 034, 348 20, 686, 808	Consus.  \$66, 306,  11, 2, 343, 1, 878, 28, 767, 135,
Total	4, 500, 000 3, 000, 000 16, 000, 000	\$51, 600, 600 2, 600 3, 800, 600 2, 500, 600 15, 800, 600	\$51, 821, 500 2, 000 3, 400, 000 1, 400, 000 16, 000, 000 423, 000	\$50, 941, 800 800 3, 800, 000 1, 500, 000 15, 000, 000 540, 000	\$50, 200, 700 3, 000 3, 000, 000 1, 400, 000 10, 000, 000 100, 000	Mint. \$64, 768, 750 10, 848 1, 899, 993 1, 034, 348 20, 086, 868 64, 640	Consus. \$06, 306, 11, 2, 343, 1, 878, 23, 767, 135,
Total	4, 500, 000 4, 500, 000 3, 000, 000 16, 000, 000 150, 000	\$51, 600, 600 2, 000 3, 800, 000 2, 500, 000 15, 800, 000 100, 000	\$51, 321, 500 2, 000 3, 400, 000 1, 400, 000 10, 000, 000 425, 000 1, 000	\$50, 941, 800 3, 800, 000 1, 500, 000 15, 000, 000 540, 000	\$59, 200, 700 3, 000 3, 000, 000 1, 400, 000 100, 000 500	Mint. \$64, 768, 780 10, 848 1, 990, 993 1, 034, 948 20, 686, 808 64, 640 405	Consus. \$96,306, 11, 2,343, 1,878,
Total	4, 500, 000 4, 500, 000 3, 000, 000 16, 000, 000 150, 000	\$51, 600, 600 2, 000 3, 800, 000 2, 500, 000 15, 800, 000 100, 000	\$51, 321, 500 2, 000 3, 400, 000 1, 400, 000 10, 000, 000 425, 000 1, 000	\$53, 941, 800 3, 800, 000 1, 500, 000 15, 000, 000 540, 000 3, 000, 000	\$59, 200, 700 3, 000 3, 000, 000 1, 400, 000 10, 000, 000 500 8, 000, 000	Mint.  \$64, 768, 780  10, 848 1, 999, 903 1, 034, 348 20, 686, 808 64, 640 405 4, 895, 959	Consus. \$06, 306, 11, 2, 343, 1, 878, 28, 757, 185, 4, 056,
Total	4, 500, 000 4, 500, 000 3, 000, 000 16, 000, 000 150, 000	\$51, 600, 600 2, 000 3, 800, 000 2, 500, 000 15, 800, 000 100, 000 8, 500, 000	\$51, 821, 500 2, 000 3, 400, 000 1, 400, 000 16, 000, 000 423, 000 1, 000 3, 600, 000	\$53, 941, 800 3, 800, 000 1, 500, 000 15, 000, 000 540, 000 500 3, 000, 000	\$59, 200, 700 3, 000 3, 000, 000 1, 400, 000 100, 000 500 8, 000, 000	Mint.  \$64, 768, 780  10, 848 1, 899, 393 1, 034, 348 20, 086, 808 64, 640 405 4, 895, 959  77, 875	Cousts. \$66, 396, 11, 2, 343, 1, 878, 29, 767, 135, 4, 056,
Total	4,500,000 3,000,000 16,000,000 150,000 2,720,000	\$51, 600, 600 2, 000 3, 800, 000 2, 500, 000 15, 800, 000 100, 000 8, 500, 000	\$51, 821, 500 2, 000 3, 400, 000 1, 400, 000 16, 000, 000 423, 000 1, 000 3, 600, 000	\$53, 941, 800 3, 800, 000 1, 500, 000 15, 000, 000 540, 000 500 3, 000, 000 15, 500, 000	\$50, 200, 700 3, 000 3, 000, 000 1, 400, 000 100, 000 500 8, 000, 000 84, 000 17, 000, 000	Mint.  \$64, 768, 750  10, 848 1, 890, 303 1, 034, 348 20, 686, 868 64, 640 405 4, 895, 959  77, 575 10, 803, 939	Census.  \$06, 306,  11, 2, 343, 1, 878, 23, 767, 135, 4, 056,  18, 17, 468,
Total	\$48,800,000  4,500,000 3,000,000 150,000 2,720,000  7,000,000 5,600,000	\$51, 600, 600 2, 000 3, 800, 000 2, 500, 000 15, 800, 000 100, 000 8, 500, 000 10, 000, 000 6, 000, 000	\$51, 821, 500 2, 000 3, 400, 000 1, 400, 000 16, 000, 000 425, 000 1, 000 3, 600, 000 12, 400, 000 5, 000, 000	\$53, 941, 800 3, 800, 000 1, 500, 000 15, 600, 000 540, 000 3, 000, 000 35, 000, 000 4, 900, 000	\$50, 200, 700 3, 000 3, 000, 000 1, 400, 000 10, 000, 000 500 8, 000, 000 84, 000 17, 000, 000 7, 000, 000	Mint.  \$64, 768, 780  10, 348 1, 999, 393 1, 934, 348 20, 986, 808 64, 640 405 4, 895, 959  77, 575 10, 393, 939 6, 206, 060	Consus.  \$06, 306,  11, 2, 343, 1, 873, 28, 767, 135, 4, 056, 18, 17, 468, 6, 072,
Total	\$48,800,000 4,500,000 3,000,000 150,000 2,720,000 7,000,000 5,600,000 3,000,000	\$51, 600, 600  2, 000 3, 800, 000 2, 500, 000 15, 800, 000 100, 000 8, 500, 000 10, 000, 000 6, 000, 000 3, 000, 000	\$51, 821, 500 2, 000 3, 400, 000 1, 400, 000 16, 000, 000 425, 000 1, 000 3, 600, 000 12, 400, 000 5, 000, 000 2, 300, 000	\$53,941,800 3,800,000 1,500,000 15,000,000 540,000 3,000,000 3,000,000 15,500,000 4,900,000 2,800,000	\$50, 200, 700   3, 000   3, 000, 000   1, 400, 000   10, 000, 000   500   8, 000, 000   84, 000   7, 000, 000   7, 000, 000   1, 200, 000	Mint.  \$64, 768, 780  10, 348 1, 999, 393 1, 934, 348 20, 986, 808 64, 640 465 4, 895, 959  77, 575 10, 393, 939 6, 206, 060 1, 461, 010	Consus.  \$66, 306,  11, 2, 343, 1, 873, 28, 767, 185, 4, 056, 18, 17, 468, 6, 072, 1, 617,
Total	\$48,800,000 4,500,000 3,000,000 16,000,000 150,000 2,720,000 5,600,000 3,000,000 8,530	\$51, 600, 600  2, 000 3, 800, 000 2, 500, 000 15, 800, 000 100, 000 3, 500, 000 3, 000, 000 3, 000, 000 3, 000, 000	\$51, 821, 500 2, 000 3, 400, 000 1, 400, 000 16, 000, 000 425, 000 1, 000 3, 600, 000 12, 400, 000 5, 000, 000 2, 300, 000 3, 000	\$53, 941, 800 3, 800, 000 1, 500, 000 15, 600, 000 540, 000 3, 000, 000 35, 000 15, 500, 000 4, 900, 000 2, 800, 000 5, 000	\$50, 200, 700   3, 000   3, 000, 000   1, 400, 000   10, 000, 000   500   84, 000   17, 000, 000   7, 000, 000   1, 200, 000   8, 500	Mint.  \$64, 768, 750  10, 848 1, 999, 993 1, 034, 348 20, 086, 808 64, 640 405 4, 895, 959  77, 575 10, 303, 930 6, 206, 060 1, 461, 010 3, 878	Census.  \$06, 306,  11, 2, 343, 1, 878, 28, 767, 135, 4, 056,  18, 17, 488, 6, 072, 1, 017, 8,
Total	\$48,800,000  4,500,000  3,000,000  150,000  2,720,000  7,000,000  5,600,000  3,000,000  8,530  20,000	\$51, 600, 600  2, 000 3, 800, 000 2, 500, 000 15, 800, 000 100, 000 8, 500, 000 10, 000, 000 6, 000, 000 3, 000, 000	\$51, 821, 500 2, 000 3, 400, 000 1, 400, 000 16, 000, 000 1, 000 3, 600, 000 12, 400, 000 5, 000, 000 2, 300, 000 5, 000	\$53, 941, 800  3, 800, 000  1, 500, 000  15, 000, 000  30, 000, 000  35, 000, 000  4, 900, 000  2, 800, 000  10, 000	\$50, 200, 700   3, 000   3, 000, 000   1, 400, 000   500   84, 000   17, 000, 000   7, 000, 000   1, 200, 000   1, 200, 000   15, 000   15, 000	Mint.  \$64, 768, 750  10, 848 1, 890, 993 1, 034, 348 20, 086, 808 64, 646 405 4, 895, 959  77, 575 10, 803, 939 6, 206, 660 1 401, 010 3, 878 38, 787	Census.  \$06, 306,  11, 2, 343, 1, 378, 23, 767, 185, 4, 056,  18, 17, 468, 6, 072, 1, 017, 8, 23,
Total	\$48,800,000 4,500,000 3,000,000 16,000,000 150,000 2,720,000 5,600,000 3,000,000 8,530	\$51, 600, 600  2, 000 3, 800, 000 2, 500, 000 15, 800, 000 100, 000 3, 500, 000 3, 000, 000 3, 000, 000 3, 000, 000	\$51, 321, 500  2, 000 3, 400, 000 1, 400, 000 10, 000, 000 425, 000 1, 000 3, 600, 000 5, 000, 000 2, 300, 000 5, 000 5, 000 5, 000 500	\$50, 941, 800  3, 800, 000  1, 500, 000  15, 600, 000  500  3, 000, 000  15, 500, 000  4, 900, 000  2, 800, 000  10, 000  500	\$59, 200, 700  3, 000 3, 000, 000 1, 400, 000 10, 000 500 8, 000, 000  7, 000, 000 1, 200, 000 1, 200, 000 15, 000 200	Mint.  \$64, 768, 750  10, 848 1, 890, 980 1, 034, 343 20, 686, 868 64, 646 405 4, 895, 959  77, 575 10, 893, 939 6, 206, 660 1 461, 610 3, 878 38, 787 232	Census.  \$06, 306,  11, 2, 343, 1, 878, 28, 767, 195, 4, 056,  18, 17, 468, 6, 072, 1, 017, 29,
Total	\$48, 800, 000  4, 500, 000 3, 000, 000 150, 000 2, 720, 000  7, 000, 000 5, 600, 000 3, 000, 000 3, 500, 000 5, 60	\$51, 600, 600  2, 000 3, 800, 000 2, 500, 000 15, 800, 000 100, 000 3, 500, 000 3, 000, 000 3, 000, 000 10, 000	\$51, 321, 500  2, 000 3, 400, 000 1, 400, 000 10, 000, 000 425, 000 1, 000 5, 000, 000 2, 300, 000 5, 000 5, 000 200, 000	\$53, 941, 800  3, 800, 000  1, 500, 000  15, 600, 000  30, 000, 000  35, 000, 000  4, 900, 000  2, \$00, 000  10, 000  500  250, 000	\$59, 200, 700  3, 000 3, 000, 000 1, 400, 000 10, 000 500 8, 000, 000 17, 000, 000 7, 000, 000 1, 200, 000 15, 000 200 300, 000	Mint.  \$64, 768, 750  10, 848 1, 890, 993 1, 034, 348 20, 086, 808 64, 646 405 4, 895, 959  77, 575 10, 803, 939 6, 206, 660 1 401, 010 3, 878 38, 787	Census.  \$66, 306,  11, 2, 343, 1, 878, 23, 757, 135, 4, 056, 17, 468, 6, 072, 1, 617, 23, 418,
Total	\$48,800,000  4,500,000  3,000,000  150,000  2,720,000  7,000,000  5,600,000  3,000,000  8,530  20,000	\$51, 600, 600  2, 000 3, 800, 000 2, 500, 000 15, 800, 000 100, 000 3, 500, 000 3, 000, 000 3, 000, 000 3, 000, 000	\$51, 321, 500  2, 000 3, 400, 000 1, 400, 000 10, 000, 000 425, 000 1, 000 3, 600, 000 5, 000, 000 2, 300, 000 5, 000 5, 000 5, 000 500	\$50, 941, 800  3, 800, 000  1, 500, 000  15, 600, 000  500  3, 000, 000  15, 500, 000  4, 900, 000  2, 800, 000  10, 000  500	\$59, 200, 700  3, 000 3, 000, 000 1, 400, 000 10, 000 500 8, 000, 000  7, 000, 000 1, 200, 000 1, 200, 000 15, 000 200	Mint.  \$64, 768, 750  10, 848 1, 890, 980 1, 034, 343 20, 686, 868 64, 646 405 4, 895, 959  77, 575 10, 893, 939 6, 206, 660 1 461, 610 3, 878 38, 787 232	Census.  \$66, 306,  11, 2, 343, 1, 873, 23, 757, 185, 4, 056, 17, 468, 6, 072, 1, 017, 3, 23, 418, 9, 057,
Total	\$48, 800, 000  4, 500, 000 3, 000, 000 150, 000 2, 720, 000  7, 000, 000 5, 600, 000 3, 000, 000 3, 500, 000 5, 60	\$51, 600, 600  2, 000 3, 800, 000 2, 500, 000 15, 800, 000 100, 000 3, 500, 000 3, 000, 000 3, 000, 000 10, 000	\$51, 321, 500  2, 000 3, 400, 000 1, 400, 000 10, 000, 000 425, 000 1, 000 5, 000, 000 2, 300, 000 5, 000 5, 000 200, 000	\$53, 941, 800  3, 800, 000  1, 500, 000  15, 600, 000  30, 000, 000  35, 000, 000  4, 900, 000  2, \$00, 000  10, 000  500  250, 000	\$59, 200, 700  3, 000 3, 000, 000 1, 400, 000 10, 000 500 8, 000, 000 17, 000, 000 7, 000, 000 1, 200, 000 15, 000 200 300, 000	Mint.  \$64, 768, 780  10, 848 1, 890, 980 1, 034, 943 20, 686, 808 64, 646 405 4, 895, 059  77, 575 10, 393, 930 6, 206, 660 1 461, 016 38, 778 232 300, 000	Census.  \$06, 396,  11, 2, 343, 1, 878, 28, 767, 135, 4, 056,  18, 17, 468, 6, 072, 1, 017, 8,
Total Llabama Llaska Llaska Llifornia Jalifornia Jalifo	\$48, 800, 000  4, 500, 000 3, 000, 000 150, 000 2, 720, 000  7, 000, 000 5, 600, 000 3, 000, 000 3, 500, 000 5, 60	\$51, 600, 600  2, 000 3, 800, 000 2, 500, 000 15, 800, 000 100, 000 3, 500, 000 3, 000, 000 3, 000, 000 10, 000	\$51, 321, 500  2, 000 3, 400, 000 1, 400, 000 10, 000, 000 425, 000 1, 000 5, 000, 000 2, 300, 000 5, 000 5, 000 200, 000	\$53, 941, 800  3, 800, 000  1, 500, 000  15, 600, 000  30, 000, 000  35, 000, 000  4, 900, 000  2, \$00, 000  10, 000  500  250, 000	\$59, 200, 700  3, 000 3, 000, 000 1, 400, 000 10, 000 500 8, 000, 000 17, 000, 000 7, 000, 000 1, 200, 000 15, 000 200 300, 000	Mint.  \$64, 768, 780  10, 848 1, 890, 980 1, 034, 943 20, 686, 808 64, 646 405 4, 895, 059  77, 575 10, 393, 930 6, 206, 660 1 461, 016 38, 778 232 300, 000	Census.  \$66, 306,  11, 2, 343, 1, 873, 23, 757, 185, 4, 066, 17, 468, 6, 072, 1, 017, 8, 23, 418, 9, 067,
Total	\$48, 800, 000  4, 500, 000 3, 000, 000 150, 000 2, 720, 000 7, 000, 000 3, 000, 000 3, 000, 000 5, 600, 000 5, 600, 000 6, 800, 000 6, 800, 000	\$51, 600, 600  2, 000 3, 800, 000 2, 500, 000 15, 800, 000 100, 000 3, 500, 000 3, 000, 000 3, 000, 000 10, 000 4, 750, 000	\$51, 321, 500  2, 000 3, 400, 000 1, 400, 000 16, 000, 000 423, 000 3, 600, 000 5, 000, 000 2, 300, 000 5, 000 5, 000 200, 000 6, 500, 000	\$53, 941, 800  3, 800, 000  1, 500, 000  540, 000  500  3, 000, 000  15, 500, 000  4, 900, 000  5, 000  10, 000  20, 000  500  20, 000  7, 000, 000	\$59, 200, 700  3, 000 3, 000, 000 1, 400, 000 10, 000 500 8, 000, 000 7, 000, 000 1, 200, 000 15, 000 200 300, 000 7, 000, 000	Mint.  \$64, 768, 780  10, 848 1, 939, 303 1, 034, 348 20, 686, 808 64, 640 405 4, 895, 959  77, 675 10, 303, 303 6, 206, 060 1 461, 010 8, 878 38, 787 232 300, 000 9, 050, 605	Census.  \$66, 306,  11, 2, 343, 1, 873, 23, 757, 185, 4, 056, 13, 17, 463, 6, 072, 1, 017, 8, 23, 418, 9, 057,

a In some years this is stated to include Alabama, Michigan, Tennessee, Texas, Vormont, Virginia, and Wyoming.

The figures for 1866 are taken from the "Report upon the mineral resources of the United States", by Special Commissioners J. Ross Browne and James W. Taylor, published in 1867. The figures for 1867 are from Commissioner J. Ross Browne's report, 1868, and those for 1868 are from the first report by Dr. R. W. Raymond on "Mineral resources of the states and territories west of the Rocky mountains", published in 1869. The figures for the years 1869 to 1875 are from Dr. Raymond's eighth and last report, published in 1876. They are given as estimates made from the best attainable authorities. In many cases he accepts the estimates of Wells, Fargo & Co. as the best attainable, but in other cases he rejects them in favor of figures obtained from other sources.



Commissioner Browne, in his report, refers to the statistics for 1866 and earlier years as follows:

Mr. Swain, superintendent of the branch mint at San Francisco, a gentleman possessing both the means and the disposition to inform himself on this subject, estimates both the products of gold and silver for Oregon, California, Nevada, and Washington territory as follows:

1861	\$43, 391, 000
1862	49, 370, 000
1863	
1864	
1865	

Great differences of opinion, however, exist as to the accuracy of this estimate (1866). To some it appears exaggerated, while others pronounce it far below the actual yield. The imperfect returns received for the last 9 months would seem to warrant the conclusion that it is not an unreasonable estimate. For instance, the product of Oregon is assumed to be \$8,000,000. Statistical tables supposed to be worthy of credit show a probable yield for that state of \$20,000,000. In 1865 the generally accepted estimate for Oregon was \$19,000,000, though that was probably above the actual product.

In his report for 1867, Commissioner J. Ross Browne writes as follows concerning the statistics of that year:

It has been impossible to obtain an account of the shipments from each agency at the express office of Wells, Fargo & Co., at San Francisco. For reasons of private expediency they refrain from giving the desired information. We have, however, the aggregate receipts of their office, and, knowing very nearly what amount can be accredited to California, Nevada, and British Columbia, can draw reasonable conclusions as to the proportion derived from Idaho, Washington, and Oregon.

The bullion product of Washington is estimated by the surveyor general at \$1,500,000; that of Oregon is rated as high as \$2,500,000. Intelligent residents of Idaho and Montana represent that the figures given in the above estimate, so far as these territories are concerned, are entirely too low, and might be doubled without exceeding the truth. The product of Idaho alone for this year is said to be from \$15,000,000 to \$18,000,000; that of Montana is estimated by the surveyor general at \$20,000,000. Similar exceptions are taken to the estimates of Colorado, New Mexico, and Arizona. As I have no grounds for accepting these statements beyond the assertion that most of the bullion is carried away in the pockets of the miners, I am inclined to rely upon the returns of the assessors, express companies, and official tables of export. Admitting that a fraction over 7 per cent may have escaped notice, although reasonable allowance is made for this in the estimate of \$70,000,000, and that a considerable sum may be derived from sources not enumerated. I feel confident the additional allowance of \$5,000,000 is sufficient to cover the entire bullion product of the United States for the year 1867, thus making the aggregate from all sources \$75,000,000, as stated in the report of the Secretary of the Treasury.

I have endeavored to obtain returns of the annual product of each state and territory since 1848; but, for the reasons already stated, and in the absence of reliable statistics, it has been impossible to make the necessary divisions with more than approximate accuracy.

Dr. Raymond's statistics ending in 1875, there was no attempt made to estimate the production of gold and silver in the United States in 1876, and the only figures given in any official report for that year are those found in the following extract from the report of the director of the mint for the fiscal year ended June 30, 1876:

From the most authentic sources of information which could be procured it has been estimated that the production of gold and silver for the fiscal year (1876) was about \$85,250,000, of which amount \$46,750,000 was gold and \$38,500,000 silver.

In the table printed in the report of the director of the mint for 1889 these figures are changed to \$39,900,000

gold and \$38,800,000 silver, a total of \$78,700,000.

In his report for the fiscal year ended June 30, 1887, page 14, the mint director estimates the product of the mines for the fiscal year at \$44,000,000 gold and \$38,000,000 silver, a total of \$82,000,000. For the calendar year 1877 the product is given in the same report, page 13, as \$45,100,000 gold and \$38,950,000 silver, distributed among the states and territories as shown in the accompanying table in the report. In this table the figures for 1877, 1878, and 1879 are from the annual reports of the director of the mint, and for the years 1880 to 1889, inclusive, they are from the "Annual reports of the director of the mint upon the statistics of production of the precious metals in the United States", the last named series of reports beginning in 1880.

The act making appropriations for the sundry civil expenses of the government for the year 1881 contained an appropriation of \$5,000 "for the collection of statistics relative to the annual production of the precious metals in the United States, to be expended under the direction of the Secretary of the Treasury". This work was assigned by the Secretary of the Treasury to the director of the mint, whose first report was for the calendar year 1880. Appropriations by acts of Congress for subsequent years have expressly provided that the collection of statistics of the production of the precious metals shall be under the direction of the director of the mint. The results of such collection have been published each year since 1880 in volumes entitled "Production of gold and silver in the United States".

The director of the mint, notwithstanding the very limited appropriation allowed for the purpose, has been able, by utilizing the exceptional facilities which his office affords, to obtain a closer approximation to the actual amount of gold and silver production in the United States than it would be possible to obtain by any method other than a complete census. In this work the director has availed himself of the records of the operations of the several mints and assay offices, of returns from private refineries, from the bankers and brokers dealing in gold and silver, and from express and other transportation companies. Special agents of the mint have also been employed in mining districts where no other facilities could be provided for collecting this class of statistics.

The following extracts from the report of the director of the mint for 1889 show his estimates for that calendar year, together with a statement of the general method he adopts in reaching the results:

PRODUCTION OF GOLD.—The product of gold from our own mines is susceptible of very accurate determination, for the reason that, with the exception of the small amount which enters directly into consumption as jewelry, the entire product finds its way very promptly to the institutions of the mint service, either in crude bullion directly from the mines and mills or in the shape of fine gold bars, the output of private refineries in the United States.

The mints of the United States offer complete facilities to the producers of gold to realize promptly the full value of their product. At the large acid refineries connected with them the base metals are eliminated and the precious metals are parted and refined at an expense to the producer of only the actual cost to the government of the operations. The coinage of gold is free—no charge to depositors—while the manufacture of fine bars bearing the attestation of the government as to weight and fineness is made at a trifling cost. The establishment of government assay offices in gold-producing sections of the country, at which the full mint value is paid depositors of gold bullion immediately upon the determination by chemical test of the quantity of the precious metals contained in their deposits (the government paying the cost of transportation to the mint at Philadelphia for coinage), naturally tends to attract to them the gold produced in those localities.

From an examination of all the returns and data at the disposal of this bureau the product of gold from the mines of the United States during the calendar year 1889 is estimated to have been 1,587,000 fine ounces, of the value of \$32,800,000.

The following statement exhibits the data upon which the estimate of the gold product is based:

#### ESTIMATE OF THE GOLD PRODUCT OF THE UNITED STATES FOR 1889 BY THE DIRECTOR OF THE MINT,

	E OUNCES.
Bullion of domestic production deposited at mints and assay offices	1, 546, 019
Bullion of domestic production (other than United States mint or assay office bars) exported from the United States	54, 012
Bullion of domestic production reported by 26 private refineries in the United States as having been made into burs	
for manufacturers and jewelers	50,000
Total	1 050 040
Deduct foreign bullion reported by private reflueries in the United States, as contained in their product of fine gold	
bars deposited at mints and assay offices and there classified as of domestic production	63, 811
Domestic product for 1889	1, 586, 220

As confirmatory of the foregoing estimate of the gold product of the United States, the following tables for the same year, based upon the work of private and government refineries, is presented:

#### ESTIMATE OF THE GOLD PRODUCT OF THE MINES IN THE UNITED STATES FOR 1880.

	OUNCES.
Domestic product of fine gold bars reported by 5 private refineries in the United States, being all who manufacture	
fine gold bars	847, 865 689, 658
Gold of domestic production reported by private works in the United States as having been made into bars for	080, 008
manfacturers and jewelers	50, 009
Domestic product	1, 587, 532

The domestic product of gold as exhibited in the above estimate was 1,587,532 fine ounces, of the value of \$32,817,190. As a mean between these two estimates, the product has been placed at 1,587,000 fine ounces, of the value of \$32,800,000.

Doubtless some slight product may have escaped the researches of this bureau. It is a well-known fact that many gold maggit and curious specimens of native gold, as well as much gold quartz, mined in the United States are annually made into articles of jewelry and ornamentation. As the value of the product so used is not a matter of record, and, moreover, adds nothing to the supply for monetary purposes, no allowance, by way of estimate, has been made for it.

PRODUCTION OF SILVER.—The product of silver from the mines of the United States is not susceptible of as accurate determination as the product of gold. As the mints of the United States are not open to the free coinage of silver, as of gold, the product of our mines which finds its way to government institutions consists of Treasury purchases of silver for the mandatory coinage of the silver dollar, silver parted from deposits of gold, and silver deposited for manufacture into fine bars with government stamp as to weight and purity. Moreover, government refineries do not offer the same advantages to producers of silver as private works, for the reason that no allowance is made at the former for the value of the base metals contained in deposits, while at private works many of the base metals commonly associated with silver in nature, such as lead and copper, are paid for, and constitute a very important and valuable component. Indeed, it may be said that considerably more than one-half of all the silver produced is extracted from lead ores, while very many copper one contain appreciable quantities of silver, which is extracted at a profit.

The difficulty, however, in ascertaining the exact product of silver from our own mines does not lie so much in the complex nature of silver ores as it does in the separation from our own product of the silver contained in foreign ores and base bullion reduced and refined in the United States.

Aside from silver bars shipped to the United States for refining, the great mass of the silver imported into this country is contained in silver-lead ores, valuable for fluxing purposes, carrying a large percentage of metallic lead and small quantities of silver to the ton. These foreign products, which began to come to the United States, principally from Mexico, in 1885, have, since the extension of railways into Mexico, largely increased in quantity. To ascertain the quantity of silver extracted from these products is exceedingly difficult and the effort to do so has entailed considerable labor on this bureau and has taxed to the utmost the courtesy of managers and officers of private refineries in this country.

Another fruitful source of difficulty lies in the different values given to silver, occasioned largely by the fluctuations in the commercial price. As the value only, and not the quantity, of silver imported and exported is registered at the customhouses, the quantity actually brought into and taken out of the country must be somewhat uncertain. Any estimate of the product of silver from our own mines, as distinguished from the product of our smelting and refining works, is at the best but a close approximation.

All the reports and data in the possession of this bureau indicate that the product of silver from our mines for the calendar year 1889 was approximately 50,000,000 fine ounces, of the commercial value, at the average price of silver during the calendar year (\$0.935 per ounce fine), of \$46,750,000, and of the coining value in silver dollars of \$64.646.464.

The following statement presents the data upon which the estimate of the silver product of the country is based:

ESTIMATE OF THE SILVER PRODUCT OF THE UNITED STATES IN 1889 BY THE DIRECTOR OF THE MINT.

Bullion deposited at mints and assay offices, classified as of domestic production.  Bullion (other than United States mint or assay office bars), classified as of domestic production, exported United States (customhouse rating at commercial value \$26,301,754, corresponding, at average price during the year, \$0.935 per fine ounce).  Contained in copper matter and ore exported from the Visited See	d from the of silver		
Bullion of domestic production reported by private refineries in the United States, silver contents not registered (approx	imate)	623	000
industrial use		2,918	8, 929
Total	-	^	
Deduct:	* * * * * * * * * * * * * * * * * * * *	61,787	, 234
	5, 833, 999 7, 999, 999		
Total imported Less foreign silver bullion deposited at mints and assay offices.	12, 833, 999 926, 556		
Foreign silver included in fine bars manufactured by private refineries in the United States and classified at the mints and customhouse as domestic (approximate)		I1. 906	442
Estimated silver product for 1889	,	49, 886	, 812

As confirmatory of the above estimate of the silver yield of our mines, the following table, exhibiting the product of private and government refineries, together with the silver exported in furnace products, is here presented:

ESTIMATE OF THE SILVER PRODUCT OF THE UNITED STATES IN 1889	
Domestic product of fine silver bars reported by 10 private refineries of the United States, being all who manufact.	
ture fine silver bars	. 983 . 700
	, 096
Estimated silver product for 1889	699

As the separation of the product of our own mines from that of foreign ores made by private refineries is not exact, something of a mean between these two estimates has been adopted as approximately representing the silver product of the United States during the calendar year, viz, 50,000,000 fine ounces.

The smelting and refining companies which made confidential returns to the director of the mint for 1889 courteously furnished these same returns to the Census Office. A tabulation from these of the production of fine gold and silver bars gives the same total figures as those given by the director of the mint.

This method is probably correct as regards the gold production, since, as stated by the director of the mint, practically all the gold finds its way to the mints and United States assay offices, and, as shown in the tables previously quoted, two independent methods of computing the total gold production give results which practically agree, differing only by 1,303 ounces. In the case of silver, however, not only the difficulties described by the director of the mint, but the fact that the two estimates made by independent methods give materially different results, indicate the possibility of both methods being quite inaccurate.

A tabulation of the returns of silver production by the refineries which produce both fine and base bullion, after all deductions have been made for the production from foreign ores, and for duplication by one establishment refining the base bullion of another (data for these deductions having been given by all the works), gives a total silver product of 50,996,055 fine ounces of silver bullion, to which should be added 629,000 ounces, reported to the director of the mint as exported in copper matte, making a total of 51,625,055 ounces, or over 1,000,000 ounces greater than the larger of the estimates given in the two tables of the director of the mint previously quoted. No greater weight, however, can be given to this figure than to the estimate of the director of the mint, for it is quite possible that it contains some duplications for which deductions were not made, and, on the other hand, the census investigation has found a number of errors of omission in these statistics, such, for example, as the item of silver exported in copper matte, given by the mint report at 629,000 ounces, while the unquestionably correct returns made to the census show that no less than 1,418,000 ounces of silver were exported in copper matte in 1889.

Another independent estimate is the sum reported to the director of the mint by the mint officers and agents for individual states and territories. This sum is, for gold 1,689,166 ounces, and for silver 56,452,025 ounces. The director of the mint, however, properly gives very little credit to these estimates by agents in the different states on account of the tendency to exaggeration on the part of producers who make returns to the mint agents.

The last independent estimate of the gold and silver production is that made by Mr. Valentine, vice president and general manager of the Wells-Fargo Express Company, based upon the returns of express agents and transportation companies. Converting his figures into ounces, they are as follows: gold, 1,573,526 fine ounces; silver, 68,945,359 fine ounces. This does not include the product of the states of the Appalachian range, nor of Michigan, which the director of the mint estimates at 18,962 ounces of gold and 64,540 ounces of silver.

The annual estimates of Mr. Valentine are widely published and quoted by statisticians, as, for example, by Sir Hector Hay in the tables furnished by him to the royal commission of Great Britain on recent changes in the relative value of the precious metals. In the report of that commission (first part, page 13) he says:

I think he (Mr. Valentine) is likely to be more correct than the mint figures for this reason: that when the mint authorities send round to the different mines to ascertain how much they have produced it is to the interest of those mining companies to exaggerate their production a little, whereas when they send their bullion by Messrs. Wells, Fargo & Co. all the different mines would declare the actual values. The mining companies would not wish to pay freight on more than the actual value, and, on the other hand, they would not like to declare a less sum, because they are insured in the same way.

Sir Hector Hay's reason for preferring Mr. Valentine's estimates to those of the director of the mint disappear, however, when the former gives the larger figures, as he does for 1889.

In the report on production of precious metals for the year 1886 the director of the mint refers to Mr. Valentine's figures as follows:

It is interesting to compare the production as here shown with the estimate of Mr. John J. Valentine, of Wells, Fargo & Co. This statistical contribution is based on the carrying trade of the country, their own and that of other express companies, railways, and other convevances.

It will be readily understood that estimates like Mr. Valentine's are for many reasons necessarily imperfect. Certain express companies are no longer carriers, as formerly, of the entire shipments of gold and silver. A large portion of the deposits at the mints and assay offices of the United States, especially the western institutions, is brought thither by hand or private conveyance, or else delivered by express companies having no relations with the Wells-Fargo company, and often in such form that the value can not be ascertained.

Besides, as more fully stated in my last report of this series, the classification as between gold and silver products in Mr. Valentine's statement is necessarily imperfect, from the fact that a large portion of the silver bullion by express carries gold, and a large portion of the gold dust and bullion by express carries silver. Any division, therefore, as to the amount of gold and silver actually contained in bullion carried by express and other conveyances must be more or less arbitrary. The value of each can be known only after the deposit has reached a mint, a United States assay office, or a private refinery, and been assayed.

The classification as between gold and silver is, in Mr. Valentine's statement, imperfect, not from any fault on the part of the compiler, but as necessarily follows from the character of his returns, as admitted by Mr. Valentine. Under date of the 15th of December, 1886, in a letter to this bureau, this gentleman frankly says:

Without going into details. I may say that the government report now more nearly approximates the actual output than ours does by reason of the necessarily burried conclusion of our statement at the close of the year. When we began these statements Wells. Fargo & Co. furnished the only information obtainable.

And in a subsequent letter, dated January 20, Mr. Valentine remarks:

As stated in a previous letter. I does your fiscal reports for the United States of America more nearly correct than ours, you having more time and better opportunities to sift local reports than we now enjoy

The above extract is conclusive as to the weight of probability which should be attached to Mr. Valentine's estimates.

The several estimates thus made by independent authorities are summarized as follows:

ESTIMATES OF PRODUCTION OF GOLD AND SILVER IN THE UNITED STATES IN 1889.

[Fine ounces.]

AUTHORITIES.	Gold.	Silver.
Mr. John J. Valentine's estimate	1, 573, 526	68, 945, 359
Estimate by officers and agents of mint	1, 689, 166	56, 452, 025
Estimate by the director of the mint	1, 587, 000	50, 000, 000
Returns from smelting and refining works		51, 625, 055
Report of the Eleventh Census	1, 590, 869	51, 354, 851

#### DISTRIBUTION OF THE PRODUCT AMONG THE STATES.

In each annual report of the director of the mint an attempt is made to distribute the estimated total production of gold and silver in the United States among the several states and territories. The means relied upon for making this distribution are stated as follows in the report for the year 1886:

It will be understood that the distribution of the product of the country among the states and territories is a matter of secondary importance, and that its correctness is only approximate. The information made use of for this purpose consists mainly of statements furnished by depositors of unrefined gold and silver at the United States mints and assay offices of the sources of the production of their bullion, reports to this bureau by the large private refineries as to the sources of their output, and reports by express and railroad companies handling bullion and ores in the course of transportation. All such reports are checked by, and compared with, the estimates prepared by the mint officers and by other agents of this bureau selected to compile the statistics of the production of the precious metals in the various states and territories.

Estimates made by mint officers and agents of the production of the states and territories assigned to them have never been accepted by this bureau as conclusive, for the following reasons:

First. That the aggregate production of gold and silver in the United States is ascertained from other and what is considered better sources of information, namely, the record of the mint service itself. Information so supplied is always verified by the disposition of

the product indicated to the bureau by the mints, customhouses, private refineries, and banks. A given product having been ascertained and accounted for, a corresponding quantity only can be distributed among the states and territories of the Union.

Second. As any one familiar with such matters is aware, there is a tendency to exaggerate upon the part of interested or sanguine persons engaged in mining not only as to the value, but as to the character and product of their properties.

Third. From the fact that local agents designated by this bureau are residents of the sections on which they report, and as such particularly selected, it is perhaps warrantable to suppose, as indeed it has sometimes been recognized, that the benefit of a doubt as between a greater or less production reasonably inures to their own divisions of the work. This remark is made without derogation of the quality of the work at the hands of such agents or of the spirit in which such work is undertaken.

Errors of the personal equation in such work rarely fail to go to the credit of the mineral resources of any given section of the country in question.

In the report for 1889 the director writes as follows concerning the estimates of mint officers and agents:

It has never been the practice to adopt the estimates of the agents for particular localities as correctly representing the product of such sections. However valuable these statistics may be as exhibiting in detail the product of particular mines or sections of the country and the condition of the mining industry in the various states, and however conscientiously the officers and agents selected may have performed the duties intrusted to them, the tendency to exaggeration on the part of individual producers is so great and the sources of information in many cases are so imperfect as to preclude the possibility of accepting, in all cases, the aggregate products reported as the product of the United States.

As has been explained, the gold product of the United States finds its way almost entirely, either directly or indirectly, to the mints of the United States for coinage purposes or for manufacture into bars, so that the total gold product of the country is readily ascertained and accounted for. The silver product of our mines is, owing to the large influx of foreign ores, much more difficult to ascertain than that of gold. The estimate we make of that product is based on what is considered more reliable data than the unverified statements of producers of crude bullion, or estimates made by parties living in and interested in the silver-producing districts.

Concerning the assistance given by private refineries and smelting works to enable the director of the mint to make his estimates of the product of the several states and territories, the same report says:

The bureau is greatly indebted to the officers and managers of the large private refineries and smelting works in the United States, as well as to their New York agents, for complete and valuable statistics in regard to the output of the precious metals from their works during the year and the sources from which the ores and base bullion were obtained. Without the co-operation of private works it would be exceedingly difficult, indeed well-nigh impossible, to have ascertained accurately the product of the precious metals in this country, for the reason that these works handle more than half of the gold and fully nine-tenths of the silver from our mines, together with all the foreign silver ores which come to this country for reduction.

Through the information furnished by smelting and reduction works turning out base silver bars the bureau has been able to trace the product of private refineries producing bars of fine gold and fine silver to the original source of production.

The reports received from these refineries are treated as confidential, and the information furnished is used mainly in assisting the bureau to verify the estimates of its own agents as to the production of the several states and territories, and as an additional aid in checking the total product of the United States based on deposits at government institutions and exports of the precious metals.

The following tables from the report for 1889 give the distribution of the gold and silver product, the first table being the estimate by the mint officers and agents in the states and territories, which estimate the director does not accept as correct, and the second the director's own estimate, based upon all the sources of information at his command:

AGGREGATE PRODUCT OF GOLD AND SILVER REPORTED BY MINT OFFICERS AND AGENTS FOR THE STATES AND TERRITORIES IN 1889.

		GO	LD.	SILVER.		
STATES AND TEBRITORIES.	Total value.		Value.	Fine ounces.	Coining value	
Total	\$107, 906, 543	1, 689, 166	\$34, 918, 173	56, 452, 025	\$72, 988, 370	
Alaska	963, 250	46, 077	952, 490	8, 322	10, 760	
Arizona	3, 811, 904	52, 828	1,092.059	2, 103, 630	2,719,845	
California	14,852,533	666, 958	13,787,252	823, 928	1, 065, 281	
Colorado	30, 195, 275	175, 902	3, 636, 217	20, 541, 770	26, 559, 058	
Georgia	108, 070	5, 205	107, 605	360	465	
Idaho	6, 496, 055	99, 445	2,055,708	5, 434, 331	4, 440, 347	
Montana	23,832,871	183, 535	3, 794, 000	15, 498, 814	20, 098, 871	
Nevada	9,547,522	154, 156	3, 186, 667	4, 919, 724	6.360.855	
New Mexico	3, 027, 425	54, 969	1, 136, 320	1, 462, 651	1, 891, 165	
North Carolina	150, 173	7.077	146,295	3,000	3,878	
Oregon	1, 393, 838	65, 415	1, 352, 249	32, 166	41. 589	
South Carolina	47, 084	2, 266	46, 852	180	232	
South Dakota	3,073,288	140, 898	2, 912, 625	124, 263	160, 663	
Texas.	460, 709			310,007	400, 709	
Utah	9, 702, 725	24,866	514, 025	7, 106, 885	9, 188, 700	
Virginia	4, 112	198	4, 100	10	12	
Washington	299, 709	9, 371	193, 709	81,984	106, 000	

APPROXIMATE DISTRIBUTION, BY PRODUCING STATES AND TERRITORIES, OF THE PRODUCT OF GOLD AND SILVER IN 1889, AS ESTIMATED BY THE DIRECTOR OF THE MINT.

STATES AND TERRITORIES.	Total value.	GO	LD.	SILVER.		
STATES AND TERRITORIES.	Total value.	Fine ounces.	Fine ounces. Value.		Coining value.	
Total	\$97, 735, 730	1, 594, 775	\$32, 967, 000	50, 094, 571	\$64, 768, 730	
Alaska	910, 343	43, 537	900, 000	8, 000	10, 343	
Arizona	2, 839, 393	43,537	900, 000	1, 500, 000	1, 939, 393	
California	14, 034, 343	628, 875	13, 000, 000	800,000	1, 034, 343	
Colorado	24, 186, 868	169, 312	3, 500, 000	16, 000, 000	20, 686, 868	
Georgia	107, 465	5, 176	107, 000	360	465	
Idaho	6, 395, 959	96, 750	2, 000, 000	3, 400, 000	4, 395, 959	
Michigan	147, 575	3,386	70, 000	60,000	77, 575	
Montana	22, 893, 939	169, 312	3, 500, 000	15, 000, 000	19, 393, 939	
Nevada	9, 206, 060	145, 125	3, 000, 000	4,800,000	6, 206, 060	
New Mexico	2, 461, 010	48, 375	1,000,000	1, 130, 000	1,461,010	
North Carolina	148, 878	7, 014	145, 000	3,000	3, 878	
Oregon	1, 238, 787	58, 050	1, 200, 000	30,000	38, 787	
South Carolina	45, 232	2, 177	45, 000	180	232	
South Dakota	2, 964, 646	140, 287	2, 900, 000	50, 000	64, 646	
Texas	300, 000			232, 031	300,000	
Utah	9, 550, 505	24, 187	500, 000	7, 000, 000	9, 050, 505	
Washington	278, 434	8, 466	175, 000	80, 000	103, 434	
Alabama, Maryland, Tennessee, Virginia, Vermont, and Wyoming.	26, 293	1, 209	25, 000	1,000	1, 293	

The returns from smelting and refining works producing fine or base silver bullion, which were originally made to the director of the mint, have, as already stated, been furnished to the Census Office. By compiling these returns and subtracting all apparent duplications of product through the shipment of base bullion from one establishment to another for refining, another independent estimate is reached, which differs considerably from that of the director of the mint. It is included in the condensed table given hereafter.

Another estimate may be made by adding to the production of fine gold and silver bullion reported by the private refineries the amount of unrefined metal deposited in the mints and United States assay offices as given in the mint director's report. As the latter amounts are given in standard ounces, nine-tenths fine, they require to be converted into fine ounces in making the addition. The results of this method are as follows:

DISTRIBUTION OF THE GOLD PRODUCT IN 1889 (MINT REPORT).

STATES AND TERRITORIES.	Unrefined gold deposited at mints and assay offices. (Standard ounces.)	Product of private refineries. (Fine ounces.)	Total. (Fine ounces.)	STATES AND TERRITORIES.	Unrefined gold deposited at mints and assay offices. (Standard ounces.)	Product of private refineries. (Fine ounces.)	Total. (Fine ounces.)
Alabama	125		113	South Dakota	151, 405	2, 461	108, 726
Alaska	5, 327	14, 640	19, 434	Tennessee	21		19
Arizona	15. 851	2,467	16, 733	Texas	79	 	71
California	151, 058	437, 446	573, 398	Utah	3,077	14, 874	17, 643
Colorado	110, 712	92, 033	191, 674	Virginia	140		126
Georgia	4, 962		4, 466	Washington	1,796	120	1,736
Idaho	47, 104	1,878	44, 272	Wyoming	417		375
Maryland	30		27	Other sources	55, 359		49, 823
Michigan	3, 747	819	4, 182	Total unrefined	766, 287	'	
Montana	94, 360	41, 484	126, 408	Equal fine ounces			
Nevada	72, 509	131, 118	196, 376	Not distributed			105, 675
New Hampshire	26		23				
New Mexico	27, 737	1, 209	26, 172	Total			1, 537, 523
North Carolina	4, 364		3, 928	Unrefined			
Oregon	13, 666	1, 659	13, 949	Jewelers' bars		50, 009	50,009
South Carolina	2, 415		2, 174	Total		1, 537, 532	1, 587, 532

#### GOLD AND SILVER.

#### DISTRIBUTION OF THE SILVER PRODUCT IN 1889 (MINT REPORT).

STATES AND TERRITORIES.	Unrefined silver deposited at mints and assay offices. (Standard ounces.)	Product of private refineries. (Fine ounces.)	Total. (Fine onuces.)	STATES AND TERRITORIES.	Unrefined silver deposited at mints and assay offices. (Standard ounces.)	Product of private refineries. (Fine ounces.)	Total. (Fine ounces.)
Alabama	23		21	South Dakota	29, 044	94, 222	120, 362
Alaska	971	900	1,774	Tennessee	1		1
Arizona	23,712	1,985,747	2, 007, 088	Texas	2, 338	282,700	284, 804
California	20, 694	1, 207, 116	1, 225, 741	Utah	13, 656	6, 606, 241	6, 618, 531
Colorado	27, 277	19, 160, 706	19, 185, 255	Virginia	6		5
Georgia	336		302	Washington	2, 422	4,578	6, 758
Idaho	63, 143	1,748,449	1, 805, 278	Wyoming	49		44
Maryland	9		8	Other sources	162, 771		146, 494
Michigan	62, 978	6, 829	63, 509	Total unrefined	2, 249, 668		
Montana	294, 038	10, 261, 544	10, 526, 178	Equal fine ounces			
Nevada	1, 494, 430	4, 364, 939	5, 628, 926	Not distributed		1, 232, 158	1, 232, 158
New Hampshire	1		1			***************************************	
New Mexico	132, 516	840, 503	959, 767	Total			49, 889, 682
North Carolina	6, 706 ;		6, 035	Unrefined		2, 024, 700	·····
Oregon	2, 430	68, 350	70, 537	Exported in copper matte		629, 000	629, 000
South Carolina	117		105	Total		50, 518, 682	50, 518, 682

# ESTIMATES OF THE PRODUCTION OF GOLD IN THE UNITED STATES IN 1889 FROM SOURCES OTHER THAN THE CENSUS REPORT.

[Fine ounces.]

STATES AND TERRITORIES.	Estimates from deposits of unre- fined gold at mints and assay offices added to fine bars reported by refineries.	Estimates by J. J. Valentine, states and terri- tories west of the Missouri river.	Estimates by mint officers and special agents.	Estimates by the director of the mint.
Total	1, 587, 532	1, 573, 526	1, 689, 166	1, 594, 775
Alabama	113			
Alaska	19, 434	40, 877	48, 077	43, 537
Arizona	16, 733	47, 062	52, 828	43, 537
California	573, 398	499, 667	666, 958	628, 875
Colorado	191, 674	170, 995	175, 902	169, 312
Georgia	4,466		5, 205	5, 176
Idaho	44, 272	155, 018	99, 445	96, 750
Maryland	27			
Michigan	4, 182			3, 386
Montana	126, 408	217, 689	183, 535	169, 312
Nevada	196, 376	149, 123	154, 156	145, 125
New Hampshire	23			(1
New Mexico	26, 172	21,019	54, 969	48, 375
North Carolina	3,928		7, 077	7, 014
Oregon	13, 949	36, 507	65, 415	58, 050
South Carolina	2, 174		2, 266	2, 177
South Dakota	138, 726	164, 822	140, 898	140, 287
Tennessee	19  .			220, 201
Texas	71 .			
Utah	17, 643	739	24, 806	24, 187
Virginia	126		198	43, 101
Washington	1, 736	6, 386	9, 371	8, 466
Wyoming	375 .		3,0,1	a, 400
Undistributed	205, 507	63, 622		1, 209

# ESTIMATES OF THE PRODUCTION OF SILVER IN THE UNITED STATES IN 1889 FROM SOURCES OTHER THAN THE CENSUS REPORT.

[Fine ounces.]

STATES AND TERRITORIES	Estimates from deposits of unre- tined silver at mints and assay offices added to fine bars reported by refineries.	Estimates from product of fine and base bullion reported by refineries.	Estimates by J. J. Valentine, states and terri- tories west of the Missouri river.	Estimates by mint officers and special agents.	Estimates by the director of the mint.
Total	50, 518, 682	51, 625, 955	68, 945, 359	56, 452, 025	50, 094, 571
Alabama	21				
Alaska		900		8, 322	8,000
Arizona	2,007,088	1, 442, 209	650, 708	2, 103, 630	1, 500, 000
California		1, 207, 203	706, 890	823, 928	800,000
Colorado	19, 185, 255	21, 461, 603	20, 576, 433	20, 541, 770	16, 000, 000
Georgia	302	*******		360	360
Idaho	1,805,278	1,745,820	8, 647, 340	3, 434, 331	3,400,000
Maryland	8	*************		************	
Michigan	63,509	*****			60,000
Montana	10, 526, 178	10, 266, 079	17, 103, 110	15, 498, 814	15, 000, 000
Nevada	5, 628, 926	4, 482, 938	6, 758, 143	4, 919, 724	4, 800, 000
New Hampshire	1	*****			,
New Mexico	959, 767	1, 695, 125	149, 282	1, 462, 651	1, 130, 000
North Carolina	6, 035			3, 000	3,000
Oregon	70, 537	68, 350	32, 662	32, 166	30,000
South Carolina	105			180	180
South Dakota	120, 362	94, 222		124, 263	50,000
Tennessee	1				·
Texas	284, 804	308, 810		310,007	232, 031
Utah	6, 618, 531	6, 849, 547	1, 877, 406	7, 106, 885	7, 000, 000
Virginia	5			10	
Washington	6, 758	4,578	90, 425	81, 984	80,000
Wyoming	44				
Not distributed	1, 378, 652	1, 368, 671	12, 952, 960		1,000
Exported in copper matte	629,000	629,000			

The causes of the errors in the mint report are explained by several of the special agents and the director of the mint, who has throughout this investigation extended every courtesy and assistance in his power to the special agent of the census, even furnishing letters of certain mint agents acknowledging and explaining the inaccuracies of their reports. Thus, a mint agent for New Mexico, writing to the director of the mint, says:

I to-day learned that there has been a considerable discrepancy found in the report made by the census taker and that of myself, especially in the returns of last year, and I have made some effort to account for the same. I can only think that the cause of this is to be found in the fact that men are willing to state what they will not swear to. I inclose a copy of the Silver City Enterprise, in which you will see that a very much larger amount of output is claimed for Grant county than I allowed in the report that I mailed to you yesterday. As stated in my report of yesterday, I have reason to believe that the report of 1889 was too large, and I am sure that it was also for the year preceding it.

Writing to the census, the same agent says:

I am sure now that my mint report for 1889 was too high, and it simply shows that men are willing to state in a bragging way what they will not swear to. This year I have cut my figures down considerably in my mint report, which has already been mailed. \* \* \* \* I found out that one mine that is a large producer put out only about half of the amount that I reported and that was given to me by one who certainly knew better, for he was in a position to know; but I know now how it happened: he was trying then to sell the extension to the mine.

One of the most reliable agents for the census, explaining the differences between the census and mint reports for California, says:

It may be said in general terms that our men visited the mines or owners personally and obtained their information from headquarters, while the mint obtained all its information by answers to circulars, sending no one into the field for information. In a great number of instances they accepted estimates which we were not permitted to do by the scheme by which the census facts were collected. We were obliged to confine ourselves to specified mines and specified questions, ignoring altogether any general information which might have been obtained. We could not accept the estimates of storekeepers and postmasters as to what they thought their camps shipped, but had to confine ourselves to facts and known mines. Hence all the estimates from small mines and from Chinese mines contained in mint reports are absent in ours. Many times in the mint reports these were duplicated. Moreover, the mint reporters themselves found that they were imposed upon by people anxious to give their camps a good name in official reports. We got all the Chinese we could and adopted good measures to obtain their figures. We had letters written in Chinese by the consultelling them to give us the proper reports. The mint took no such precaution, as they could only send circulars, and to those no Chinese responded.

In the matter of hydraulic mines the mint reports may be better than ours, for they may know from their position as recipients of the gold where it came from or can estimate by the camp. In our case, we were in most places received in the same way and the answer was: "Closed by injunctions of United States courts". Of course under these circumstances they could give no information as to product, for it might be used against them by the government, which asked for the information. We tried to overcome this feeling, but it was impossible. I am perfectly certain that our figures are altogether more accurate than those of the mint.

In one county in California the mint gives the same mine under two names, the product of one of these names being \$75,000 and the other \$18,000. The census agent in that county says that the smaller of these two figures is a large exaggeration, and, moreover, that the mint has made a triplicate report of some of the mines in this county; thus, one item purports to be the yield of the "White river mines", another is the yield of the small mines of White river, and then the mines of White river are given singly. In this way a triplicate report is made of most of the mines of the district. One of the mines of this county was reported to the mint as having produced over \$50,000. The mine is reported to the census by the owner as having produced not over \$1,200. The agent says further:

It frequently occurs that mines are relocated, first by one party and then another, and thus have several names, and generally each of these names of a paying mine finds its way to the mint. The department and the mint assume that mining is done by corporations. I do not think there are any paying mines in these 2 counties conducted by any firm which could maintain an action at law, either as a corporation or as a copartnership. 3 companies kept books (as they claimed), but in each case the books were said to be in San Francisco (somewhere). This circumstance of having no legal organization is what causes these "joint companies" to be known by so many names and to be thus duplicated and triplicated by the mint.

#### Another census agent for California says:

One difficulty you will find with the mint figures is that the production of a mine is frequently credited to the county from which the gold shipment is made to the mint. Thus La Porte, in Plumas county, gets the credit of gold produced in northern Sieria county; Camptonville, in Yuba county, the credit of the production in a part of Sieria county. Another source of error in the mint figures is that fraudulent, or rather incorrect, statements are willfully made, giving large products to mines that are mere prospects.

#### A census agent in Colorado writes:

In most cases the census returns are much more reliable than the mint reports. Two reasons may be given why this should be so. In the first place, parties furnishing information for the census are closely questioned; and, secondly, the law provides a penalty for furnishing false information to census enumerators. On the other hand, information furnished the mint is sent by mail as an act of good nature, and the sender may lie as much as he likes with little risk of exposure.

From the evidence accumulated in the preceding pages it is apparent that the figures published as representing the production of the precious metals in the United States up to recent years have in many cases been mere estimates, sometimes careless and wild, which for the most part have been reduced in subsequent years as their exaggerations became more apparent. It is, indeed, quite probable that even the final figures of years prior to 1880, as published in the last report of the director of the mint, are still much above the actual production of gold and silver, while the published distribution of the production among the states and territories has always been inaccurate.

The Eleventh Census has sought to profit by this experience and to obtain the actual facts as nearly as possible. The reports of the director of the mint, and especially those reports which purport to give the actual production of the individual mines in several of the states, were extremely useful. With sworn confidential returns from the same mines it was easy to ascertain where the mint reports were in error. It was found that a great number of the mines credited in that report with an important output were in fact closed and did not produce anything during the year, and in some cases had not been worked for a number of years. In other cases "Chinese" and "small mines" were credited with considerable amounts, while there were neither Chinese nor small mines in the county. In still other cases the owners of the working mines, knowing that the name and output of the mine would be published in the mint report, gave grossly exaggerated figures, which in the confidential sworn reports made to the census shrunk to much more modest ones.

As a final check on the accuracy of the census report, special agents were sent to the districts where these reports differed materially from the mint reports, and with the figures credited to each mine and to each county as returned to the mint and to the census arranged in parallel columns, they were required to investigate and report on every case of material difference. No reasonable precaution was neglected in order to secure the fullest and most accurate returns possible for this important industry. Absolute accuracy is unattainable for the reasons already given, but it is believed that the statistics given in this report are correct within the limits of reasonable accuracy, and that the distribution of the product among the states and territories is very much more reliable than any statement heretofore made on this subject.

#### CENSUS RETURNS OF GOLD AND SILVER PRODUCTION.

Unquestionably the most accurate estimate of the total gold produced is that adopted by the director of the mint and based upon the deposits at the several United States mints and assay offices and at the private refineries. The census report has therefore added to the direct returns obtained from producers such of these deposits as were "unaccounted for" in these returns, which evidently represent the gold exported in ore or matte and the many very small sources of production which it will always be impossible to secure directly.

The total production of gold as given in this report, therefore, is made up of the mint and refinery deposits and of gold exported directly by producers. The distribution of this product among the several states and territories differs in some cases widely from, and is unquestionably much more accurate than, the estimates given in other reports.

The following tables give the production and other statistics of gold and silver as ascertained by the census investigation:

CENSUS STATISTICS OF THE GOLD PRODUCT OF THE MINES IN THE UNITED STATES IN 1889.

ODD:		
· PRODUCT.	Fine ounces.	Value.
Bullion of domestic production at mint and assay offices.	1, 546, 019	\$31, 959, 612
Gold of domestic production (other than United States mint or assay office bars) exported from the United States as bullion or as gold contained in copper matte.	58, 652	1, 212, 444
Bullion of domestic production reported by 26 private refineries in the United States as having been made into bars for manufacturers and jewelers.	50, 009	1, 033, 778
Total	1, 654, 680	34, 205, 834
Deduct foreign bullion reported by private refineries in the United States as contained in their product of fine gold bars deposited at mint and assay offices and there classified as of domestic production.	63, 811	1, 319, 090
Domestic product for 1889	1, 590, 869	32, 886, 744

This total amount exceeds that which the director of the mint obtained by this method by \$86,744, which is the aggregate of two items, one of gold contained in certain copper matte and the other of bullion exported, and which were not included in the mint report. Of this total the census direct returns, including certain estimates made upon the spot by census subagents of the production of mines from which official schedules could not be obtained, amount to \$28,638,202, and the excess of gold deposited at mints and private refineries over amount traced to its source amounts to \$4,248,542, making a total of \$32,886,744.

As shown by the above table, the census investigation has traced directly to the mines which produced it about 87 per cent of the total gold output. In apportioning the gold produced among the states and territories the distribution of this excess of deposits over census returns has necessarily been arbitrary, but in making it consideration has been given to the relative probability of accuracy of the census figures in each state, according to the extent of placer mines in these states, and the likelihood that the direct census returns were more correct in one state than in another. Guided by this consideration, the following distribution of this excess of deposits over the census returns is made, and these figures appear in the summary of each state as "undistributed" gold:

DISTRIBUTION OF UNDISTRIBUTED GOLD, BY STATES AND TERRITORIES.

Alaska	
Alaska	\$100,000
Arizona	150,000
California	2 152 374
Colorado	700,000
T.	100,000
Montana	846, 168
Nevada	150,000
New Mexico.	100,000
	,
Oregon	
South Dakota	200,000
Utah	100,000
Washington	- /
Washington	150,000
Total	1 040 740
	4, 248, 042

The production of silver is much more easily traced to its source than is that of gold, for the reasons that it is produced in larger quantity, and, being about 20 times as heavy for the same value, is transported through channels more easily followed. The silver produced in the United States goes either to the private refineries, to the mint, or is exported direct in ore, in copper matte, or in base bullion. The total, obtained by aggregating the amounts reported from these channels, corresponds with a surprising degree of closeness to the returns obtained directly from the mines, and is a very convincing proof of the thoroughness of the census investigation and of the accuracy of its returns.

CENSUS REPORT OF THE SILVER PRODUCT OF MINES IN THE UNITED STATES IN 1889.

	PRODUCT.	Fine ounces.	Value at \$1.2929 per ounce.
1	Domestic product of fine silver bars reported by the 10 private refineries of the United States who manufacture all the fine silver bars.	47, 864, 982	\$61, 884, 635
	Unrefined silver of domestic production deposited at mints and assay offices. Silver exported in base bullion, in copper matte, and in ore (a)	2, 024, 700 1, 506, 771	2, 617, 735 1, 948, 104
	Estimated silver product for 1889	51, 396, 453	66, 450, 474
The state of the s	Census direct returns from the mines	51, 354, 851	•66, 396, 988

a Of the silver exported, 877,871 ounces which went out in copper matte and in bullion originating in Montana were not included in the mint report.

The following table gives the census returns of the gold and silver production in the United States in 1889, distributed to the states where the metal was mined:

PRODUCTION OF GOLD AND SILVER IN THE CENSUS YEAR 1889, BY STATES AND TERRITORIES. (a)

STATES AND TERRITORIES. Total value.	Total	GOLD.		SILVER.				GOLD.		SILVER,	
	Fine ounces.	Value.	Fine ounces.	Value.	STATES AND TERRI- TORIES.	Total value.	Fine ounces.	Value.	Fine ounces.	Value.	
Total	699, 283, <b>732</b>	1, 590, 869	\$32, 886, 744	51, 354, 851	\$66, 396, 988	Montana	<b>\$20, 608, 287</b>	151, 861	\$3, 139, 327	13, 511, 455	\$17, 468, 969
1						Nevada	9, 578, 536	169, 617	3, 506, 295	4,696,605	6, 072, 241
						New Mexico	2, 433, 233	39, 457	815, 655	1, 251, 124	1, 617, 578
Alabama	2, 639	123	2, 539	77	100	North Carolina	150, 674	7. 977	146, 795	3, 600	3, 879
Alaska	916, 568	43,762	904, 650	9, 219	11,918	Oregon	987, 691	46.648	964, 309	17, 851	23, 382
Arizona	3, 254, 151	44, 029	910, 174	1, 812, 961	2, 343, 977	South Carolina	<b>47</b> , 055	2. 266	46, 853	179	232
California	13, 960, 529	608, 882	12, 586, 722	1, 062, 578	1, 373, 807	South Dakota	3, 226, 468	149, 533	3,091,137	104.672	135, 331
Colorado	27, 641, 610	187, 881	3, 883, 859	18, 375, 551	23, 757, 751	Texas	425, 001	330	6, 828	323, 438	418, 173
Georgia	108, 069	5,204	107, 605	359	464	Utah	9, 544, 680	23, 591	487, 666	7,005,193	9, 057, 014
Idaho	6, 040, 641	95, 983	1, 984, 159	3, 137, 508	4, 056, 482	Virginia	4. 113	198	4, 100	10	13
Maryland	10, 369	501	10, 369			Washington	222, 951	9, 005	186, 150	28.464	36, 801
Michigan	105, 925	4, 210	87, 040	14, 607	18, 885	Wyoming		711	14, 512		

a Computed to the nearest whole ounce.

#### DETAILED DISTRIBUTION OF GOLD AND SILVER, BY STATES AND TERRITORIES.

The following table gives the distribution of gold and silver of the territory of Alaska, by mining districts:

GOLD AND SILVER PRODUCTION IN ALASKA TERRITORY.

districts.	Total.	Gold.	Silver.
Total	\$916, 568	\$904, 650	\$11,918
Harris	684, 768	679, 850	4,918
Sheep Creek	10,000	3,000	7,000
Silver Bow Basin		25, 800	
Yukon	96,000	96,000	
Undistributed gold	100,000	100,000	

The following table gives the gold and silver production of states of the Appalachian range:

#### GOLD AND SILVER PRODUCTION IN STATES OF THE APPALACHIAN RANGE.

STATES.	Total.	Gold.	Silver.
Total	<b>\$322, 949</b>	\$318, 261	\$4,688
ALABAMA.—Clay, Cleburne, and Tallapoosa counties, and undistributed petty mining.	2, 639	2, 539	100
GEORGIA.—Cherokee, Haralson, McDuffie, Lumpkin, and White counties, and undistributed petty mining (total for state).	108, 069	107, 605	464
MARYLAND.—Montgomery county (total for state)	10, 369	10, 369	
NORTH CAROLINA.—Burke, Cabarrus, Clay, Cleveland, Davidson, Franklin, Guilford, Henderson, Mecklenburg, Montgomery, Moore, Randolph, Rowan, Stanly, and Union counties, and undistributed petty mining (total for state).	150, 674	146, 795	3,879
SOUTH CAROLINA.—Chesterfield, Lancaster, Pickens, Union, and York counties, and undistributed petty mining (total for state).	47, 085	46, 853	232
Virginia.—Buckingham, Cuipeper, Fluvanna, Orange, and Stafford counties, and undistributed petty mining (total for state).	4, 113	4, 100	13

#### MINERAL INDUSTRIES IN THE UNITED STATES.

The following table gives the production of gold and silver by subdivisions of states and territories: GOLD AND SILVER PRODUCTION, BY SUBDIVISIONS OF STATES AND TERRITORIES.

AF	RIZONA.			COLORA	DO-Continued.		
COUNTIES.	Total.	Gold.	Silver.	COUNTIES.	Total.	Gold.	Silver.
Total	\$3, 254, 151	\$910, 174	\$2, 343, 977	Lake	. \$8, 467, 151	\$221, 167	\$8, 245, 984
Cochise	811, 675	62, 370	749, 305	La Plata	.,	4, 791	2,820
Gila	61, 865	240	61, 625	Ouray	1	236, 309	1, 664, 822
Graham	5, 244	684	4, 560	Park	1 1	127, 886	321, 674
Maricopa	41, 166	39, 849	1,317	Pitkin	1 ' ' 1	22, 238	7,340,184
Mohave	260, 290	42, 799	217, 491	Routt.		10, 131 18, 400	100
Pima	738, 316	57, 306	681, 010	Saguache	· · · · · ·	5, 458	23,096
Pinal	194, 135	1,710	192, 425	San Juan		142, 687	467, 675
Yavapai	809, 758	454, 921	354, 837	San Miguel		306, 328	800, 678
Yuma	181,702	100, 295	81, 407	Summit.		274, 352	618, 095
Undistributed gold	150,000	150,000		Undistributed gold	1	100, 000	
CAI	IFORNIA.				IDAHO.		<u>'</u>
Total	13, 960, 529	12, 586, 722	1, 373, 807	Total	6, 040, 641	1, 984, 159	4, 056, 482
Amader	911, 252	908, 246	3,006	130	0.000	P 0/2	
Butte	301, 592	300, 680	912	Ada		3, 307	465 046
Calaveras.	736, 881	733, 058	3,823	Bingham		13, 869 20, 236	465, 946 41
Colusa	4, 187	4,061	126	Boise	1	29, 236	248, 474
Del Norte	17, 400	17,400	120	Cassia	1	299, 099 12, 671	18, 419
Eldorado	183,575	183, 210	365	Custer	1 1	164, 475	728, 627
Fresno	207, 523	A 180, 697	26,826	Elmore	1	314, 132	27, 016
Humboldt	78, 847	78, 709	138	Idaho		242, 356	12, 001
Inyo	148, 025	43, 645	104,380	Kootenai	1 1	20,000	8, 500
Kern	60, 750	60, 472	278	Latah		1,000	0,000
Lassen	22,700	22,026	674	Lemhi	1	377, 868	130, 099
Los Angeles	79, 109	78, 609	500	Logan	1 1	24, 107	419, 450
Mariposa	20,052	20, 052		Owyhee	1	258, 045	432, 777
Merced	100	100		Shoshone		222, 712	1,557,022
Mono	206, 398	180, 408	25, 990	Washington	1	10, 282	8, 045
Monterey	3,600	3,600	20,000	Washington	10,027	10, 202	0,040
Napa	50, 206	307	49, 899		rarra 131		
Nevada	2, 006, 757	1,967,649	39, 108	MI.	ICHIGAN.		
Orange	950	2,001,020	950				
Placer	1, 215, 594	1, 211, 209	4, 385	Totai	105, 925	87, 040	18, 885
Plumas	499, 430	499, 077	353	Gogebic and Marquette	99, 357	87, 040	12, 317
Sacramento	166,000	166, 000		Houghton and Keweenaw	1		6, 568
San Bernardine	1, 108, 222	2,821	1, 105, 401	110151101111111111111111111111111111111			
San Diego	251, 073	251,071	2	N.	ONTANA.		
Santa Barbara	7, 045	7,045		al.	DATAMA.		
Shasta	332, 996	328, 964	4, 032		00 000 00 <del>0</del>	0 100 007	77.400.000
Sierra	1, 329, 192	1, 327, 290	1,902	Total	20, 608, 287	3, 139, 327	17, 468, 960
Siskiyou	808, 198	807, 910	288	Beaverhead	904, 656	35, 602	869, 054
Stanislaus	15, 955	15, 955		Deerlodge		136, 748	6, 209, 482
Trinity	683, 542	683, 427	115	Fergus	1 1	348, 896	3. 807
Tulare	17, 110	17, 109	1	Jefferson		297, 420	1, 412, 179
Tuolumne	228, 550	228, 337	213	Lewis and Clarke	1	1,080,321	627, 321
Ventura	6, 831	6, 831		Madison		11,571	864
Yuba	98, 513	98, 373	140	Meagher		342	49, 803
Undistributed gold	2, 152, 374	2, 152, 374		Missoula		4,750	113, 145
O British and Control of the Control	2,202,012	2,102,011		Silverbow	1	377, 509	7, 518, 879
co	LORADO.			Undistributed gold	4	846, 168	664, 426
Total	27, 641, 610	3, 883, 859	23, 757, 751	, and the same of	EVADA.		
Boulder	417, 782	310, 725	107, 057	Total	9, 578, 536	3, 506, 295	6, 072, 241
Chaffee	550, 429	260, 627	289, 802	Total	2,010,000	2,000,200	J
Clear Creek	2,715,003	372, 400	2, 342, 603	Churchill	28, 250	1,428	26, 825
Conejos	6, 213	3,099	3, 114	Douglas		3, 585	40
Custer	58,904	19	58, 885	Elko		261, 653	575, 908
Dolores	516, 205	38, 512	477, 693	Esmeralda	653, 088	111, 764	541, 324
Eagle	471, 941	121, 654	350, 287	Eureka	1, 239, 243	178, 946	1, 060, 297
Gilpin	1, 721, 747	1, 289, 420	432, 327	Humboldt		447	11, 283
		~, ~~~, ~~~	,				1
Gunnison	205, 882	16, 162	189,720	Lander	194, 147	88, 106	106, 041

#### GOLD AND SILVER PRODUCTION, BY SUBDIVISIONS, ETC .- Continued.

NEVAD	A—Continued.	SOUTH DAKOTA—Continued.					
COUNTIES.	Total.	Gold.	Silver.	COUNTIES.	Total.	Gold.	Silver.
Lyon	\$249, 135	\$103, 251	\$145, 884	Pennington	\$31, 079	\$31,079	
Nye	185, 324	3, 760	181, 564	Undistributed gold	200, 000	200, 000	
Storev	5, 739, 049	2, 510, 998	3, 228, 051		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		
Washoe	11, 046	10, 896	150	**************************************	TT 10		
White Pine	118,006	15, 915	102,091	I.F.	XAS.		
Undistributed gold	150, 000	150, 000		Total	425, 001	6, 828	\$418, 173
			<u> </u>	1.7744	***************************************	O, OEO	ψπ.υ., π.υ.
NEW	MEXICO.			El Paso	89, 448	6, 828	82, 620
	,			Presidio	335, 553		335, 553
Total	2, 433, 233	815, 655	1, 6 17, 578			Name of the language of the la	
Bernalillo	6, 740	6, 740		τ	TAH.		
Colfax	23, 221	23, 166	55				ī
Donna Ana	73, 025		73, 025	Total	9, 544, 680	487, 666	9, 057, 014
Grant	1, 121, 237	436, 025	685, 212	_			
Lincoln	55, 208	52, 100	3, 108	Beaver	363.322	327	362, 995
Rio Arriba	5, 340	5, 240	100	Juab	3, 112, 422	213, 115	2, 899, 307
Santa Fe.	92, 216	41, 694	50, 522	Piute	8, 995	1, 395	7, 600
Sierra.	844, 081	135, 933	708, 148	Salt Lake	687, 263	73,887	613, 376
	112, 165	14, 757	97, 408	Summit	5, 029, 083	88, 294	4, 940, 789
Socorro	100, 000	100,000	81, 400	Tooele	124, 157	10,648	113, 509
Undistributed gold	100,000	100,000		Wasatch	2,000		2,000
		· · · · · · · · · · · · · · · · · · ·		Washington	117, 438		117, 438
O	REGON.			Undistributed gold	100,000	100, 000	
Total	987, 691	964, 309	23, 382	WASE	IINGTON.		Marketti sa vita tibasa a sa s
Baker	308, 719	307, 097	1,622				
Cons	21, 327	21,327	-,	Total	222, 951	186, 150	36, 801
Crook	300	300		10141	222, 831	180, 130	30, 501
Curry	4,879	4, 879		Asotin	1,500	1, 500	
Douglas	2,500	2,500		Kittitas	10,822	10, 822	
Grant	93, 553	73, 613	19, 940	Okanogan	20, 157	4, 757	15, 400
	31,438	31, 433	19, 940	Snohomish	494	300	194
Jackson	49, 915	49, 525	390	Stevens	35, 478	14, 271	21, 207
Josephine			UBG	Wallawalla	2,500	2, 500	
Malheur	38, 350	38, 350	1, 425	Whitman	2,000	2,000	
Union Undistributed gold	236, 710 200, 000	235, 285 200, 000	1, 425	Undistributed gold	150,000	150,000	
Charten gold	200,000	200,000					<u> </u>
SOUTE	H DAKOTA.			WY	OMING.		
Total	3, 226, 468	3, 091, 137	135, 331	Total	14, 512	14, 512	
Custer	3, 500	3, 500		Albany	6, 172	6, 172	
	2, 991, 889	2, 856, 558	135, 331	Fremont	8, 340	8, 340	1

#### PER CAPITA PRODUCTION OF GOLD AND SILVER IN 1889.

The per capita production of the precious metals in the several producing states is given in the table following. In Nevada gold and silver production is almost the sole industry of the state, and amounts to \$209.3166 per capita, while Montana, Idaho, Colorado, and Arizona follow in this order, the chief occupation of the people being the production of the precious metals.

The average production of gold and silver in the United States amounted in 1889 to \$1.5847 per capita of the entire population of the country. In 1880 the per capita production of the precious metals was \$1.4842. The production of gold and silver has therefore increased somewhat more rapidly than population in the past 10 years.

#### MINERAL INDUSTRIES IN THE UNITED STATES.

#### PER CAPITA PRODUCTION OF GOLD AND SILVER, BY STATES AND TERRITORIES.

STATES AND TERRITORIES.	Population,	Total production of gold and silver in 1889.	Production of gold and silver per capita.	STATES AND TERRITORIES.	Population.	Total production of gold and silver in 1889.	Production of gold and silver per capita,
The United States	62, 622, 250			Miehigan	2, 093, 889	\$105, 925	\$0.0506
Alaska	30, 329	·		Montana	132, 159	20, 608, 287	155, 9356
Total	00 0F0 FF0	+00 000 mon		Nevada	45, 761	9, 578, 530	209, 3166
10(31	62, 652, 579	\$99, 283, 782	\$1.5847	New Mexico	153, 593	2,433, 233	15.8421
		=		North Carolina	1, 617, 947	150, 674	0.0931
Alabama	1 513, 017	2, 639	0.0017	Oregon	313, 767	987, 691	3. 1478
Alaska	30, 329	916, 568	30, 2208	South Carolina	1, 151, 149	47, 085	0.0409
Arizona	59, 620	3, 254, 151	54, 5815	South Dakota	328, 808	3, 226, 468	9.8126
California	1, 208, 130	13, 960, 529	11, 5555	Texas	2, 235, 523	425, 001	0.1901
Colorado	412, 198	27, 641, 610	67, 0591	Utah	207, 905	9, 544, 680	45, 9089
Georgia	1, 837, 353	108, 069	0, 0588	Virginia	1,655,980	4, 113	0.0025
Idaho	84,385	6, 040, 641	71. 5843	Washington	349, 390	222, 951	0.6381
Maryland	1, 042, 399	10, 369	0. 0099	Wyoming	60, 705	14, 512	0.2391

#### STATE AND PER CAPITA PRODUCTION OF GOLD AND SILVER ACCORDING TO RANK.

Precious metal producing states and territories in order of their value of production.	Total gold and silver production.	Precious metal states and territories in order of their production per capita.	Production of gold and silver per capita.	Precious metal producing states and territories in order of their value of production.	Total gold and silver production.	Precious metal states and territories in order of their production per capita.	Production of gold and silver per capita.
1. Colorado	\$27, 641, 610	Nevada	\$209.3166	12. Texas	\$425,001	Washington	\$0,6381
2. Montana	20, 608, 287	Montana	155, 9356	13. Washington	222, 951	Wyoming	0.2391
3. California	13, 960, 529	Idaho	71. 5843	14. North Carolina	150, 674		0.1901
4. Nevada	9, 578, 536	Colorado	67. 0591	15. Georgia	108, 069	North Carolina	0.0931
5. Utah	9, 544, 680	Arizona	54, 5815	16. Michigan	105, 925	Georgia	0.0588
6. Idaho	6, 040, 641	Utah	45. 9089	17. South Carolina	47, 085	Michigan	0.0506
7. Arizona	3, 254, 151	Alaska	30. 2208	18. Wyoming	14, 512	South Carolina	0, 0409
8. South Dakota	3, 226, 468	New Mexico	15.8421	19. Maryland	10, 369	Maryland	0, 0099
9. New Mexico	2,433,233	California	11, 5555	20. Virginia	4, 113	Virginia	0.0025
10. Oregon	987, 691	South Dakota	9. 8126	21. Alabama	2, 639	Alabama	0.0017
11. Alaska	916, 568	Oregon	3. 1478				

The production as given in the report of the Tenth Census is compared in the following tables with the production in 1889 as given in preceding pages. The relative importance of the several states is shown.

# COMPARISON OF BULLION PRODUCTION IN THE CALENDAR YEAR 1889 WITH PRODUCTION IN CENSUS YEAR ENDED MAY 31, 1880.

	E	LEVENTH CENSU	s.	TENTH CENSUS.				
STATES AND TERRITORIES.	Total.	Gold.	Silver.	Total.	Gold,	Silver.		
Total	\$99, 283, 732	\$32, 886, 744	\$66, 396, 988	\$74, 490, 620	\$33, 379, 663	\$41, 110, 957		
Alabama	2, 639	2, 539	100	1, 301	1, 301			
Alaska	916, 568	904, 650	11, 915	6,002	5, 951	51		
Arizona	3, 254, 151	910, 174	2, 343, 977	2, 537, 790	211, 965	2, 325, 825		
California	13, 960, 529	12, 586, 722	1, 373, 807	18, 301, 828	17, 150, 941	1, 150, 887		
Colorado	27, 641, 610	3, 883, 859	23, 757, 751	19, 249, 172	2, 699, 898	16, 549, 274		
Dakota	3, 226, 468	3, 091, 137	135, 331	3, 376, 656	3, 305, 843	70, 813		
Georgia	108, 069	107, 605	464	81, 361	81, 029	332		
Idaho	6, 040, 641	1, 984, 159	4, 056, 482	1, 944, 203	1, 479, 653	464, 550		
Maine				10, 199	2, 999	7, 200		
Maryland	10, 369	10, 369						
Michigan	105, 925	87, 040	18, 885	25, 858		25, 858		
Montana	20, 608, 287	3, 139, 327	17, 468, 960	4, 710, 835	1, 805, 767	2, 905, 068		
Nevada	9, 578, 536	3, 506, 295	6, 972, 241	17, 318, 909	4, 888, 242	12, 430, 667		
New Hampshire				26, 999	10, 999	16,000		
New Mexico	2, 433, 233	815, 655	1, 617, 578	441, 691	49, 354	392, 337		
North Carolina	150, 674	146, 795	3,879 .	119, 093	118, 953	140		
Oregon	987, 691	964, 309	23, 382	1, 125, 494	1, 097, 701	27,793		
South Carolina	47, 085	46, 853	232	13, 096	13, 040	56		
Tennessee				1, 998	1, 998	•••••••		
Texas	425, 001	6, 828	418, 173					
Utah	9, 544, 686	487, 666	9, 057, 014	5, 034, 674	291, 587	4, 743, 087		
Virginia	4, 113	4,100	13	9, 321	9, 321			
Washington	222, 951	186, 150	36, 861	136, 819	135, 800	1,019		
Wyoming	14, 512	14, 512		17, 321	17, 321			

The following table gives the percentage of product of the various states and territories:

PERCENTAGE OF PRODUCT, BY STATES AND TERRITORIES.

	ELE	EVENTH CENS	eus.	Т	ENTH CENSU	s.
STATES AND TERRITORIES.	Total.	Gold.	Silver.	Total.	Gold.	Silver.
Total	. 100.00	100.00	100.00	100.00	100, 00	160.00
Alabama		0.01				
Alaska	. 0,92	2.75	0.02	0.01	0.02	
Arizona	. 3.28	2.77	3, 53	3.41	0.64	5, 66
California	. 14.06	38, 27	2, 67	24.57	51.38	2, 80
Colorado	. 27.84	11.81	35. 78	25, 84	8.09	40,25
Dakota	. 3. 25	9.40	0.20	4.53	9.90	0, 17
Georgia	. 0.11	6, 33		0.11	0.24	: '
Idaho	1 11	6. 63	G. 11	2.61	4.43	1.13
Maine	.]			0.01	0.01	0. 62
Maryland	. 0.01	0.03				
Michigan	- (	0.27	0.63	0.04		0.66
Montana		9. 55	26. 31	6.33	5.41	7.07
Nevada	1 11	10, 06	9.14	23. 25	14.64	30. 24
New Hampshire				0.04	0.03	0.04
New Mexico	1 (1	2,48	2.44	0.59	0.15	0. 95
North Carolina	. 0.15	0.45	0.01	0.16	0.36	
Oregon	1 ()	2.93	0.03	1.51	3.29	0.07
South Carolina	1	0.14		0.02	0.04	
Tennessee	1			<b></b>	6.01	
Texas	( )	0.02	0.63			
Utah	. 9.61	1.48	13.64	6.76	0.87	11.54
Virginia		0.01		0.01	0.03	
Washington	4 :1	0.57	0.06	0.18	0.41	
Wyoming	1 1	0.04		0.02	0.05	

#### NOTES ON THE STATISTICAL TABLES.

RELATIVE PRODUCING IMPORTANCE OF MINES.—In the columns showing the relative producing importance of various mines only those mines are considered from which returns were received and which produced bullion, or from which ore was sold and the assay values of such ores appear in the value of the production. Active mines which produced only ore which was not sold or treated in 1889 do not appear in this statement, neither do the figures include small and irregularly worked placer, Chinese, and other diggings not separately listed as mines, and from which no returns could be obtained.

ORE PRODUCED.—All ore reported produced in 1889, whether remaining on the dump at the end of the year or not, is included under this head. The returns of "ore produced" and "ore sold" were very imperfect, and the figures in the tables do not therefore represent the output or sales at all accurately.

ORE SOLD.—This includes no ore remaining on dump or reported as produced in 1889 and sold or treated in 1890, but only the ore reported as sold in 1889, whether mined in 1889 or in earlier years.

MOTIVE POWER.—The statistics of motive power include only such as were reported on schedules, and therefore do not represent the total amount of motive power actually used. As schedules were received from nearly all the mines that were important enough to require a steam boiler and engine, it is probable that the figures for boilers and engines are nearly correct, but no reliance whatever can be placed on the figures for water wheels, whims, windlasses, and other small motors.

APPROXIMATION OF LABOR, WAGES, AND OTHER EXPENDITURES AND VALUATIONS OF MINES FROM WHICH FULL STATISTICS COULD NOT BE OBTAINED.—In a great number of cases, especially of small mines and placers, it has been impossible to obtain actual figures of the number of men employed, the average number of days worked, the supplies or other expenditures, or the valuation of the mines and machinery. In such cases an approximate estimate of labor and wages has been made by taking these items for the mines from which returns could not be obtained, as bearing the same ratio to the bullion produced by such mines as they do for the mines from which statistics were obtained in the same county, and increasing the total figures of these items for the county by the percentage which the bullion from mines giving imperfect returns bears to the bullion produced by mines giving full returns. Thus, if the total bullion produced by the mines in a certain county which gave full statistics of labor, number of men employed, and wages paid is \$100,000, and there is \$10,000 worth of bullion produced by mines from which no statistics except the amount of bullion could be obtained, then the total figures of men employed, wages, etc., for those mines which produced the \$100,000 are increased by 10 per cent to make the total for the county. As

these mines are chiefly small placer mines and diggings, with little or no machinery, no estimate has been placed upon their valuation.

In the cases of the "undistributed gold" for several states, which could not be apportioned to the counties, and of the undistributed gold and silver in Montana, the same plan of estimating the labor, etc., for producing this undistributed gold and silver has been followed, using the total figures for the state as the basis upon which the percentage is calculated. In making these additions the average wages per day and the average number of days worked per year has been taken as the same as that calculated from the returns of mines in the county or state which gives full statistics, increasing the number of men by the percentage found as above described. This is as good a rule as could be adopted in making such estimates; but it is probable that the bullion produced by mines giving imperfect statistics cost the labor of a larger number of men, working shorter time and at lower wages, than a similar amount of bullion produced by mines returning full statistics, for the reason that fully organized mines, which return complete statistics, covering probably four-fifths of the total product, work steadily during the year and pay the highest rates of wages, but employ comparatively few men in proportion to the amount of bullion extracted, while the majority of the small mines and diggings are worked by their owners irregularly, sometimes for only a few days in the year, no actual wages being paid, and the product, which might be called the wages of the operator, amounting to less than the ordinary laborer's wages in the district. In this way a great number of men may be employed to produce a very small result.

In the Pacific states, which include Washington, Oregon, and California, a large amount of the gold product is obtained from irregular workings in ravines and gulches, beds of rivers, etc., of which no definite idea can be obtained as to the amount of wages received by the miners. As a usual thing the wages are just what they manage to get out of the ground. In such instances, for the purpose of this investigation, the wages are computed the same as the product, the rate per day being obtained by prorating the average number of men employed there during the year. The amount that is made in this way varies considerably, and ranges from 50 cents to \$4 per day.

In other instances a large portion of the labor is performed by owners of the mines. In such cases, if they worked alone, they were counted as laborers; if employing others, as foremen, the compensation in each instance was computed at the average for the same class in the same county.

COPPER AND LEAD PRODUCED BY MINES LISTED AS GOLD AND SILVER MINES, AND SILVER PRODUCED BY MINES WHOSE CHIEF PRODUCTION IS COPPER AND LEAD.—As many of the gold and silver mines produce also copper and lead, and many copper and lead mines produce gold and silver, it is impossible to exactly apportion the labor, wages, supplies, and other expenditures, and also the valuation of such mines, to the respective metals produced by them. The method adopted in the compilation of the statistics for approximately apportioning the labor and other costs and the valuation is as follows: In cases in which the mine as reported produced chiefly gold or silver, or both, the mine is taken as a precious metal mine, and its complete returns of labor, expenditures, valuation, etc., are taken as belonging entirely to its gold and silver production. In the case of lead and copper mines which produced small quantities of gold and silver, the amount of such gold and silver has been included with the county totals, and an apportionment of the labor, wages, and valuations has been made by taking the proportion which the gold and silver thus included bears to the rest of the bullion produced in the county and adding the percentage accordingly, assuming that the average wages and the average number of days worked in producing this added bullion were the same as the average for the county.

In this manner it is believed that as near an approximation as possible has been made of the amount of labor, wages, etc., expended in the production of gold and silver and of the value of the mines, machinery, etc., utilized in the production of these metals.

### STATISTICS OF GOLD AND SILVER MINES IN THE UNITED STATES IN 1889.

			PRODU	CTION.				EMPL	OYÉS AB	OVE GROU	ND.		
STATES AND TERRI-	Total value.	G	old.	Si	lver.	Aver	age numb	er employe	d.	Av	erage wag	ges per day	
TORIES.		Fine ounces.	Value.	Fine ounces.	Coining value.	Foremen or over- seers.	Mechan- ics.	Laborers.	Boys under 16 years.	Foremen or over- seers.	Mechan- ics.	67 \$2.51 59 0.90 00 2.82 2.46 26 2.05 80 2.91 47 0.92 04 3.04 1.05	Boys under 16 years.
Total	\$99, 283, 732	1, 590, 869	\$32, 886, 744	51, 354, 851	<b>\$66,</b> 396, 988	1, 585	3, 273	17, 085	82	\$4.04	\$3,67	\$2.51	\$1.16
Alabama	2, 639	123	2, 539	77	100	3	3	4		3, 00	1, 59	0.90	35-200-000
Alaska	916, 568	43, 762	904, 650	9, 219	11, 918	16	21	158		5.50	5.00	1	
Arizona	3, 254, 151	44, 029	910, 174	1, 812, 961	2, 343, 977	64	118	703	2	4.59	3.89		1.50
California	13, 960, 529	608, 882	12, 586, 722	1,062,578	1,373,807	565	660	6, 231	21	3, 30	3. 26	1	
Colorado	27, 641, 610	187, 881	3, 883, 859	18, 375, 551	23, 757, 751	330	781	1, 505	16	4.33	3, 80	1	1.70
Georgia	108, 069	5, 204	107, 605	359	464	22	22	152		1.33	1.47		
Idaho	6, 040, 641	95, 983	1, 984, 159	3, 137, 508	4,056,482	128	354	964	2	4, 64	4.04	1	
Maryland	10, 369	501	10, 369			2		50		2, 25			
Michigan	105, 925	4, 210	87, 040	14, 607	18,885	2	7	32		3, 25	2.25	1.81	
Montana	20, 608, 287	151, 861	3, 139, 327	13, 511, 455	17, 468, 960	96	307	2, 613	5	5. 39	4.14	3, 25	1.40
Nevada	9, 578, 536	169, 617	3, 506, 295	4, 696, 605	6, 072, 241	83	261	779	1	5.07	4.56	3, 22	2.00
New Mexico	2, 433, 233	39, 457	815, 655	1, 251, 124	1,617,578	45	90	520	13	4.09	3.50	2.31	1. 27
North Carolina	150, 674	7, 077	146, 795	3,000	3,879	21	53	230	16	2.27	1.44	0.88	0, 32
Oregon	987, 691	46, 648	964, 309	17,851	23,382	59	132	1, 490	3	3.32	2.92	2.29	0.83
South Carolina	47, 085	2, 266	46, 853	179	232	7	13	114	1	3.02	2.54	0, 99	0.50
South Dakota	3, 226, 468	149, 533	3, 091, 137	104, 672	135, 331	31	260	554		4.57	3.23	2.85	
Texas	425, 001	330	6, 828	323, 438	418, 173	7	10	36		4.62	2.83	2,07	
Utah	9, 544, 680	23, 591	487, 666	7, 005, 193	9,057,014	85	171	475	2	5. 27	3.93	3.14	1.00
Virginia	4, 113	198	4, 100	10	13	2		30		1.38		1.00	
Washington	222, 951	9, 005	186, 150	28, 464	36, 801	3	3	394		5.00	4.00	3.00	1
Wyoming	14, 512	711	14, 512			14	7	51		3.86	3. 07	2.36	

	EMPLOY	és above gi	COUND-cont	inued.				employés be	LOW GROUND	).		
STATES AND TERRITORIES.	Average nu	ımber of day	s worked du	ıring year.	A	verage num	ber employe	ed.		Average wa	iges per day	
20,1,20	Foremen or overseers.	Mechanics.	Laborers.	Boys under 16 years.	Foremen or overseers.	Miners.	Laborers.	Boys under 16 years.	Foremen or overseers.	Miners.	Laborers.	Boys under 15 years.
Total	216	244	195	199	1, 352	29, 144	3, 870	43	\$4.16	\$3, 12	\$2.46	\$1.51
Alabama	155	210	150		1	7	6		3.00	1. 25	0.83	
Alaska	238	305	285	]	. 9	127	55		4.86	3, 60	2.00	
Arizona	219	187	205	145	34	1, 467	132	1	4.44	3.17	2, 24	1.50
California	182	196	147	129-	303	5, 522	944	8	3.49	2.74	2.28	1.50
Colorado	234	254	237	212	396	9, 585	569	14	4, 22	3.08	2.88	1.69
Georgia	173	250	228		17	41	93		1.60	1.05	0.80	
Idaho	211	203	187	285	163	2, 566	318		4.79	3.59	3.10	
Maryland	249		257			2	10			1.50	1.25	
Michigan	312	350	319		1	40	13		2,25	2.00	1.80	
Montana	286	296	287	300	65	2, 552	254	5	5.11	3,48	3. 13	1.75
Nevada	304	298	270	365	. 84	2,003	214	1	4.83	3.60	2. 91	1.50
New Mexico	169	193	204	166	48	1, 202	154	12	4.15	3. 15	2. 26	1. 21
North Carolina	242	193	179	243	18	238	178		2.26	1.02	0.85	
Oregon	140	199	130	240	22	653	57	1	3.92	3. 16	2. 23	1.50
South Carolina	63	113	92	26	2	34	20		3.10	1.15	0.90	
South Dakota	272	311	204		31	645	369		4.75	3.49	2, 99	
Texas	130	174	147		5	78	192		2.60	1.27	1. 25	
Utah	307	319	311	365	132	2,065	274	1	4.21	3.04	2.80	1.50
Virginia	50		70									
Washington	221	280	139		8	187	7		4.69	3.43	3.28	
Wyoming	105	56	81		13	130	11		4.84	3, 05	2.36	

#### MINERAL INDUSTRIES IN THE UNITED STATES.

### STATISTICS OF GOLD AND SILVER MINES IN THE UNITED STATES IN 1889—Continued.

	EMPLOYÉ	S BELOW (	sround—co	nt'd.					NUMBER	OF MINES	PRODUCING	G		NONPRO MI	DUCTIVE NES.
STATES AND TERRITORIES.	Average	number during	of days wo	orked	Total number of mines.	Total pro- ducing mines	Less	\$1,000	\$10,000	<b>\$50,000</b>	\$100,000	\$250,000		Mines	
	Foremen or over- seers,	Miners.	Laborers,	Boys under 16 years.		reported.	than	to \$10,000.	to	\$50,000 \$0 \$100,000.	\$100,000 to \$250,000.	\$250,000 to \$500,000,	Over \$500,000.	but non- produc- tive.	Number of mines idle.
Total	238	236	244	208	6, 004	3, 729	1, 610	1,408	437	95	107	44	28	1, 00.9	1, 260
Alabama	210	165	137		3	3	2	1			***************************************				
Alaska	360	300	282		12	5	2	1	1				1	7	
Arizona	193	215	199 .	89	192	154	26	82	34	7	4	1		14	24
California	217	209	237	103	2, 109	1, 359	627	583	102	18	21	6	2	244	500
Colorado	226	241	244	257	1, 871	988	426	331	134	27	44	19	7	418	465
Georgia	148	179	212		18	15	5	7	3					3	Í
Idaho	247	204	206		536	421	209	147	42	12	8	3		69	40
Maryland		250	260		2	2	1	1						ļ.,	
Michigan	310	310	310		3	2	 	1	1					1	
Montana	303	295	292	324	114	75	13	- 21	13	3	9	8	8	26	13
Nevada	312	289	248	30	245	171	47	69	29	12	9	2	3	44	30
New Mexico	233	214	228	211.	250	129	28	56	34	7	3	1		57	-64
North Carolina	197	155	205		24	17	4	9	4					7	
Oregon		157	200	40	285	200	122	63	13	2				30	55
South Carolina	73	70	24		4	2		1	1			<i>-</i>		2	
South Dakota	299	293	321		48	31	12	€	6	3		1	3	8	9
Texas	163	175	156		10	5	2			1	2			1	4
Utah	279	273	316	200	129	66	9	21	19	3	7	3	4	26	87
Virginia	• • • • • • • •				7	3	3							4	
Washington	124	134	154		8 <b>6</b>	70	65	_ 4	1	•••••				7	. 9
Wyoming	80	58	108		56	11	7	4		<i></i>				41	4

				E	(PENDI	TURES.			. •		VALUE OF	MINING PRO	PERTY.
STATES AND TERRI-						Office t	orce.				İ		
TORIUS.	Grand total of expendi- tures.	Grand total of wages.	Total wages paid in 1889.	Paid to con- tractors.		Males.	Fe	males.	Value of supplies.	Other ex- penditures.	Total value of plant.	Value of buildings.	Value of railroads on sur-
	tures.		in 1000.	tractors.	Num- ber.	Wages paid.	Num- ber.	Wages paid.			_	_	face.
Total	\$63 <b>,</b> 451, 130	\$43, 180, 696	\$40, 412, 022	\$1,421,301	848	\$1, 335, 189	25	\$12, 184	\$13, 817, 739	\$6, 452, 701	\$465, 960, 566	\$7, 565, 918	\$1, 475, 674
Alabama	8, 042	7, 588	6, 363			1, 225		ļ	335	119	35, 000	1,400	1,050
Alaska	618, 009	315, 498	304, 731		4	10, 767	ļ		301, 236	1, 275	4, 239, 955	41,778	16,633
Arizona	2, 058, 039	1, 599, 259	1, 499, 641	48, 902	30	50, 716			348, 662	110, 118	19, 734, 884	207, 264	17, 800
California	12, 506, 555	9, 689, 265	9, 191, 500	296, 373	160	199, 955	4	1, 437	2, 151, 229	666, 061	67, 641, 986	1, 662, 014	238, 467
Colorado	13, 834, 332	10, 114, 682	9, 339, 875	400,772	219	368, 639	7	5, 396	2, 559, 705	1, 159, 945	137, 881, 531	1, 235, 853	137, 562
Georgia	141, 474	90, 474	77, 070	958	16	12, 446			18, 634	32, 366	1,504,758	12,815	9,420
Idaho	4, 870, 484	3, 686, 362	3, 331, 151	194, 257	104	160, 261	9	693	889, 958	294, 164	44, 194, 594	1, 012, 677	283, 183
Maryland	18, 001	13, 800	12, 800		1	1,000	••••		2, 632	1, 569	370, 000	1,000	685
Michigan	99, 183	56, 198	45, 096	10, 447	2	655	<b> </b>		9, 152	33, 833	676, 212	11,600	87, 406
Montana	9, 259, 657	6, 123, 132	5, 881, 500	120, 567	52	120, 815	1	250	2, 399, 963	736, 562	53, 256, 396	494, 619	312, 150
Nevada	8, 254, 755	3, 764, 256	3, 522, 280	36, 011	119	203, 385	1	2, 580	2, 329, 607	2, 160, 892	25, 049, 695	476, 331	160, 524
New Mexico	1, 730, 126	1, 333, 462	1, 226, 857	55, 383	30	49, 454	2	1,768	270, 706	125, 958	18, 268, 499	256, 349	15,000
North Carolina	285, 795	195, 614	153 <b>, 4</b> 39	13, 945	27	28, 230			64, 731	25, 450	2, 173, 993	58, 540	6, 603
Oregon	1, 604, 781	970, 758	909,001	13, 907	28	47, 850			549, 745	84, 278	15, 151, 203	684, 004	28, 626
South Carolina	79, 098	37, 078	33,078		2	4, 000	·		11,052	30, 968	1, 148, 050	15, 125	12,000
South Dakota	2, 589, 383	1, 742, 042	1, 605, 738	120, 169	9	16, 135			721, 139	126, 202	5, 271, 110	124, 775	8,087
Texas	205, 808	82, 586	76, 146	270	5	6, 170			17, 602	105, 620	405, 292	7, 900	
Utah	4, 875, 211	3, 022, 648	2, 869, 852	105, 535	33	47, 261			1, 111, 963	740, 600	63, 009, 466	1, 229, 109	138,378
Virginia	2, 875	2,400	2, 100		1	300			175	300	50, 000	2, 500	
Washington	328, 816	282, 759	277, 859	2, 500	1	2, 400			35, 320	10, 737	3, 536, 925	10, 520	500
Wyoming	80, 712	50, 835	<b>4</b> 5, <b>94</b> 5	1, 305	5	3, 525	1	GÙ	24, 193	5, 684	2, 361, 017	19, 745	1,600

#### STATISTICS OF GOLD AND SILVER MINES IN THE UNITED STATES IN 1889-Continued.

		VAL	CE OF M	NING PROPI	erry—conti	nued.		v	ALUE OF	MILL OR	REDUCTION	Works.		MOTIV	e Pow	er.
STATES AND TERRITORIES.			Under-	Mine				m		)tl.l	3.5		Во	oilers.	Е	ngines.
	Machine	i ii	nprove- ments.	supplies.	Mine prop	per. Cas	п.	Tot	ai.   1	sunungs.	Machiner	y. Supplies.	Num- ber.	Horse power.	Num ber.	Horse power.
Total	\$14, 985, 2	15 \$95	, 806, 648	\$3, 919, 480	\$338, 094, 8	321 \$4,112	, 810	\$20, 36	2,772	5, 685, 562	\$13, 456, 93	8 \$1, 220, 272	2, 034	78, 343	1, 364	55, 122
Alabama	20, 4	65	4, 353	287	6,	395 1	050		8, 456	700	6. 63	0 1,100	1	14	1	
Alaska	148, 0	67	155, 343	83,000	3,778,4	467 16	, 667	55	6, 307	53, 788	465, 71		1	369	2	300
Arizona	1		, 906, 560	105, 370			,100		8,495	198, 060	585, 83	l .	1	2, 563	60	1,039
California	_,, .	,	, 305, 794	585, 431	,	}	, 483		2,982	976, 241	2, 683, 85	1	•	9,813	266	8, 633
Colorado	1	i	316, 640	719,062			825		2,244	690, 719	1,699,16	i	1	23, 929 369	502	13, 973
Georgia	i .		96, 896	8,007		j	, 280		9,411	32, 540 760, 118	185, 22 1, 599, 88	1		5, 559	80	
1daho Maryland	928, 4 1, 9	1	1, 295, 875 16, 825	415, 634 750	1 .	1	, 570	i	0,888 5,175	1, 500	3, 67	1		100	1	,
Michigan	1 '	- 1	19, 100	18, 690	1 '	1	409		5, 175	1, 500	3,0		5	270	5	1
Montana		1	15, 100	546, 603		1	620	3.31	4,577	1, 179, 919	1, 861, 94	6 272, 712	1	8, 266		
Nevada	1, 278, 0		, 445, 625	348, 854		1	, 250	1	8, 176	458, 881	1, 187, 35		1	9, 283	139	1
New Mexico	881,0	- 1	2, 413, 506	312, 822			122		9,910	201, 540	829, 15		ı	3, 773	62	i i
North Carolina	168, 3		404, 328	8, 652	,		519	'	1,414	52, 334	244, 27	1		4, 113	- 1	
Oregon	1	L	, 524, 368	93, 116		1	556	Į.	5,006	447, 993	650, 18	1	26	811	16	1,796
South Carolina	4		67, 000	4, 500	1,031,	300		7	8,725	9,000	68, 22	5 1,500	12	595	4	210
South Dakota	336, 9	23	603, 888	37, 462	4, 140,	827 19	, 148	57	3,774	155,402	389, 06	8 29, 304	. 66	3, 427	41	2, 969
Texas	9, 2	900	25, 000	4, 19	357,	000 2	,000	4	19, 560	10,000	20,00	0 19,560	2	20	2	66
Utah	1, 013, 5	09 2:	2, 111, 817	605, 271	35, 726,	352 2, 183	,030	1,44	15, 047	408,752	857, 22	8 179,067	139	4, 525	f.,	
Virginia	2, 5	00	5,000	2,000	38,	000			7,500	2, 000	5, 00	1	1	145	11	
Washington	1	3	399, 840	6, 26	1		, 000		34, 550	18, 650	11, 90	1	1		1.0	
Wyoming	121, 5	50	335, 982	13, 51	1,868,	444	181	13	30, 575	27,425	102,60	0 550	8	378	12	449
STATES AND TERRITORIES.	Other power.		otors.	Num- ber of ani- mals.	Total value of bullion.	Total capital in vested.	of per of	capital r dollar bullion	Amount of bullio produce per dolla of capita	n I Total e r penditur	v- es. Value bulli- per d lar c expen	on of ex- ol- pense per f dollar of	of app	ge Ave ar- as ofit valu (—) tone tal se	erage say ie per of ore old.	Average bullion value per ton of ore treated.
Total								- 1					capit	al.	.[	
		623	18, 821	3,965	99, 283, 732	\$486, 323, 33	38	\$4.90	\$0.20	\$63, 451, 1	36 \$1.	56 \$0.64			45. 88	\$13.30
Alabama		623	18, 821	3,965	99, 283, 732	\$486, 323, 33 43, 43		\$4.90 16.47	\$0. 20 0. 06	=		56 \$0, 64 33 3, 05		37 \$	45. 88	\$13.30
Alahama	<del></del>	623	18, 821				56			8,0	042 0.		7.	37 \$		\$13.30
		623	18, 821	3 354	2, 639	43, 4	56 32	16. 47 5. 23 6. 32	0.06 0.19 0.10	8, 0 618, 0 2, 058, 0	042 0. 009 1. 039 1.	33 3.05 48 0.67 58 0.63	7. —11. 6. 5.	37 \$ 43 22 82 1	13. 77	34.26
Alaska	. (a)			3 354	2, 639 916, 568	43, 43 4, 796, 20 20, 563, 33 71, 434, 90	56 32 79	16. 47 5. 23 6. 32 5. 12	0. 06 0. 19 0. 10 0. 20	8, 0 618, 0 7, 058, 0 12, 506, 8	042 0. 009 1. 039 1. 055 1.	33 3.05 48 0.67 58 0.63 12 0.90	7. 12. 6. 5.	37 \$ 43 22 82 1 .04	13. 77 74. 79	34. 26 7. 90
Alaska	(a) (b)	2 370 34	40 12, 063 1, 253	354 1,007 1,109	2, 639 916, 568 3, 254, 151 13, 960, 529 27, 641, 610	43, 43 4, 796, 26 20, 563, 3 71, 434, 96 140, 313, 7	56 32 79 38	16. 47 5. 23 6. 32 5. 12 5. 08	0. 06 0. 19 0. 16 0. 20 0. 20	8, 0 618, 0 7, 058, 0 12, 506, 8 13, 834, 8	342 0. 39 1. 355 1. 332 2.	33 3.05 48 0.67 58 0.63 12 0.90 00 0.50	7. 12. 6. 5. 2.	37 \$ 43 22 82 1 .04 .84	13. 77 74. 79 42. 86	34. 26 7. 90 8. 95
Alaska	(a) (b) (c)	2 370 34 25	40 12,063 1,253 20	354 1,007 1,109 9	2, 639 916, 568 3, 254, 151 13, 960, 529 27, 641, 610 108, 069	43, 44 4, 796, 26 20, 563, 33 71, 434, 96 140, 313, 7 1, 724, 16	56 52 79 38 75	16. 47 5. 23 6. 32 5. 12 5. 08 15. 95	0. 06 0. 16 0. 16 0. 20 0. 20	8, 0 618, 0 7, 2, 058, 0 12, 506, 8 13, 834, 8 141, 4	342 0. 39 1. 355 1. 332 2. 474 0.	33 3.05 48 0.67 58 0.63 12 0.90 00 0.50 76 1.31	7. — 12. 6. 5. 2. 9. — 1	37 \$43 22 82 1	13. 77 74. 79 42. 86	34. 26 7. 90 8. 95
Alaska	(a) (b) (c) (d) (e)	2 370 34	40 12, 063 1, 253	354 1,007 1,109 9	2, 639 916, 568 3, 254, 151 13, 960, 529 27, 641, 610 108, 069 6, 040, 641	43, 43 4, 796, 24 20, 563, 33 71, 434, 96 140, 313, 7 1, 724, 16 46, 735, 43	56 32 79 38 75 39 32	16. 47 5. 23 6. 32 5. 12 5. 08 15. 95 7. 74	0. 06 0. 19 0. 16 0. 26 0. 20 0. 00 0. 11	8, 0 618, 0 2, 058, 0 12, 506, 8 13, 834, 3 141, 4 4, 870, 8	142 0.109 1.	33 3.05 48 0.67 58 0.63 12 0.90 00 0.50 76 1.31 24 0.81	7. 15. 6. 5. 2. 9. 11. 2.	37 \$ 43 22 82 1 .04 84 94 50	13. 77 74. 79 42. 86	34. 26 7. 90 8. 95
Alaska	. (a) . (b) . (c) . (d) . (e)	2 370 34 25	40 12,063 1,253 20	354 1,007 1,109 9 273 3	2, 639 916, 568 3, 254, 151 13, 960, 529 27, 641, 610 108, 069 6, 040, 641 10, 369	43, 4i 4, 796, 2i 20, 563, 3; 71, 434, 9i 140, 313, 7' 1, 724, 1i 46, 735, 4i 375, 1'	56 52 59 58 55 55 59 59 57 5	16. 47 5. 23 6. 32 5. 12 5. 08 15. 95 7. 74 36. 18	0. 06 0. 19 0. 16 0. 20 0. 20 0. 00 0. 11 0. 00	8, 0 618, 0 9, 058, 0 12, 506, 8 13, 834, 5 141, 4 8 4, 870, 4	142 0. 169 1. 169 1.	33 3.05 48 0.67 58 0.63 12 0.90 00 0.50 76 1.31 24 0.81 58 1.74	715. 6. 5. 2. 91. 22.	37 \$ 43 22 82 1 44 44 44 45	13. 77 74. 79 42. 86	34. 26 7. 90 8. 95
Alaska	(a) (b) (c) (d) (e) (d)	2 370 34 25 07	40 12,063 1,253 20 3,274	354 1,007 1,109 9 273 3 6	2, 639 916, 568 3, 254, 151 13, 960, 529 27, 641, 610 108, 069 6, 040, 641 10, 369 105, 925	43, 44 4, 796, 20 20, 563, 31 71, 434, 90 140, 313, 71 1, 724, 10 46, 735, 41 375, 11 676, 2	566 52 59 58 55 55 59 59 52 57 55	16. 47 5. 23 6. 32 5. 12 5. 08 15. 95 7. 74 36. 18 6. 38	0. 06 0. 19 0. 16 0. 20 0. 20 0. 00 0. 19 0. 00	8, 0 618, 0 2, 058, 0 12, 506, 8 13, 834, 5 3 141, 4 8 4, 870, 8 3 18, 0 99, 1	142 0. 169 1. 169 1.	33 3.05 48 0.67 58 0.63 12 0.90 00 0.50 76 1.31 24 0.81 58 1.74 07 0.94	715. 6. 5. 2. 911 22. 1	37 \$ 43 22 82 1 04 84 94 90	13. 77 74. 79 42. 86	34. 26 7. 90 8. 95
Alaska	(a) (b) (c) (d) (e) (d) (d) (e) (f)	2 370 34 25 67	40 12,063 1,253 20 3,274	354 1,007 1,109 9 273 3 6 265	2, 639 916, 568 3, 254, 151 13, 960, 529 27, 641, 610 108, 069 6, 040, 641 10, 369 105, 925 20, 608, 287	43, 44 4, 796, 20 20, 563, 31 71, 434, 90 140, 313, 71 1, 724, 10 46, 735, 40 375, 11 676, 2 56, 570, 9	566 52 59 38 75 39 32 75 12	16. 47 5. 23 6. 32 5. 12 5. 08 15. 95 7. 74 36. 18 6. 38 2. 75	0. 06 0. 14 0. 16 0. 22 0. 20 0. 00 0. 11 0. 00	8, 0 618, 0 2, 058, 0 12, 506, 8 13, 834, 8 3 141, 4 8 4, 870, 6 18, 6 99, 1 9, 259, 0	142 0. 109 1. 139 1. 1555 1. 1332 2. 174 0. 184 1. 1001 0. 183 1. 1357 2.	33 3.05 48 0.67 58 0.63 12 0.90 00 0.50 76 1.31 24 0.81 58 1.74 07 0.94 23 0.45	715. 6. 5. 2. 91 22. 1	37 \$ 43 43 43 43 43 44 .	13. 77 74. 79 42. 86	34. 26 7. 90 8. 95 3. 32 42. 31
Alaska Arizona California Colorado Georgia Idaho Maryland Michigan Montana Nevada	(a) (b) (c) (d) (e) (d) (e)	2 370 34 25 07	40 12,063 1,253 20 3,274	354 1,007 1,109 9 273 3 6 265 233	2, 639 916, 568 3, 254, 151 13, 960, 529 27, 641, 610 108, 069 6, 040, 641 10, 369 105, 925 20, 608, 287 9, 578, 536	43, 4; 4, 796, 2; 20, 563, 3; 71, 434, 9; 140, 313, 7; 1, 724, 1; 46, 735, 4; 676, 2 56, 570, 9; 26, 867, 8	566 52 59 58 55 55 59 53 57 55 57 57 57 57 57 57 57 57 57 57 57	16. 47 5. 23 6. 32 5. 12 5. 08 15. 95 7. 74 36. 18 6. 38 2. 75 2. 81	0. 06 0. 19 0. 16 0. 20 0. 20 0. 00 0. 19 0. 00 0. 19	8, 0 618, 0 2, 058, 0 12, 506, 8 13, 834, 8 3 141, 4 8 4, 870, 6 18, 0 99, 1 9, 259, 0 8, 254, 7	142 0. 109 1. 139 1. 1555 1. 1332 2. 174 0. 184 1. 1001 0. 183 1. 1857 2.	33 3.05 48 0.67 58 0.63 12 0.90 00 0.50 76 1.31 24 0.81 58 1.74 07 0.94 23 0.45 16 0.86	715. 6. 5. 2. 91 22 1 20 4	37 \$ 43 1 43 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	713. 77 74. 79 42. 86 39. 98 28. 34	34. 26 7. 90 8. 95 3. 32 42. 31 21. 76
Alaska Arizona California Colorade Georgia Idaho Maryland Michigan Montana Nevada New Mexico	(a) (b) (c) (d) (e) (d) (e)	2 370 34 25 67 	40 12, 063 1, 253 20 3, 274 158 705	3 354 1,007 1,109 9 273 3 6 265 233 290	2, 639 916, 568 3, 254, 151 13, 960, 529 27, 641, 610 108, 069 6, 040, 641 10, 369 105, 925 20, 608, 287 9, 578, 536 2, 433, 233	43, 44 4, 796, 24 20, 563, 33 71, 434, 94 140, 313, 7' 1, 724, 14 46, 735, 44 375, 1' 676, 2 56, 570, 9 26, 867, 8' 19, 348, 4	566 32 79 38 75 32 75 12 73 71	16. 47 5. 23 6. 32 5. 12 5. 08 15. 95 7. 74 36. 18 6. 38 2. 75 2. 81 7. 95	0. 06 0. 11 0. 16 0. 20 0. 20 0. 01 0. 03 0. 11 0. 30 0. 31	8, 0 618, 0 12, 058, 0 12, 506, 8 13, 834, 8 141, 4 8 4, 870, 8 18, 0 99, 259, 0 8, 254, 1 1, 730, 1	142 0. 142 0. 149 1. 159 1. 1555 1. 1555 2. 174 0. 184 1. 1657 2. 1655 1. 1657 2. 1755 1. 1766 1.	33 3.05 48 0.67 58 0.63 12 0.90 00 0.50 76 1.31 24 0.81 58 1.74 07 0.94 23 0.45 16 0.86 41 0.71	715. 6. 5. 2. 91 1 22 1 20 4.	37 \$ 43 1 43	13. 77 74. 79 42. 86	34. 26 7. 90 8. 95 3. 32 42. 31
Alaska Arizona California Colorade Georgia Idaho Maryland Michigan Montana Nevada New Mexico North Carolina	(a) (b) (c) (d) (e) (e) (d) (f) (g) (g)	2 370 34 25 67 	40 12, 063 1, 253 20 3, 274 158 705	3 354 1,007 1,109 9 273 3 6 265 233 200 42	2, 639 916, 568 3, 254, 151 13, 960, 529 27, 641, 610 108, 069 6, 040, 641 10, 369 105, 925 20, 608, 287 9, 578, 536 2, 433, 233 150, 674	43, 44 4, 796, 24 20, 563, 33 71, 434, 94 140, 313, 7' 1, 724, 14 46, 735, 44 375, 1' 676, 2 56, 570, 9 26, 867, 8' 19, 348, 4 2, 475, 4	56   56   57   57   57   57   57   57	16. 47 5. 23 6. 32 5. 12 5. 08 15. 95 7. 74 36. 18 6. 38 2. 75 2. 81 7. 95 16. 43	0. 06 0. 11 0. 16 0. 20 0. 21 0. 00 0. 11 0. 03 0. 31 0. 31	6 8, 0 618, 0 7 2, 058, 0 12, 506, 5 13, 834, 5 141, 4 3 4, 870, 6 6 99, 9 6 9, 259, 0 3 8, 254, 3 1, 730, 225, 5 5	142 0. 142 0. 169 1. 16	33 3.05 48 0.67 58 0.63 12 0.90 00 0.50 76 1.31 24 0.81 58 1.74 07 0.94 23 0.45 16 0.86 41 0.71 53 1.90	715. 6. 5. 2. 91 1 22 1 20 4 3 -5	37 \$ 43 22 82 1	713. 77 74. 79 42. 86 39. 98 28. 34	34. 26 7. 90 8. 95 3. 32 42. 31 21. 76 15. 98
Alaska Arizona California Colorade Georgia Idaho Maryland Michigan Montana Nevada New Mexico North Carolina Oregon	(a) (b) (c) (d) (e) (e) (f) (g) (g) (h)	2 370 34 25 67 	40 12, 063 1, 253 20 3, 274 158 705	3 354 1,007 1,109 9 273 3 6 265 233 230 42 126	2, 639 916, 568 3, 254, 151 13, 960, 529 27, 641, 610 108, 069 6, 040, 641 10, 369 105, 925 20, 608, 287 9, 578, 536 2, 433, 233 159, 674 987, 691	43, 44 4, 796, 24 20, 563, 33 71, 434, 94 140, 313, 7' 1, 724, 14 46, 735, 44 375, 1' 676, 2 56, 570, 9 26, 867, 8 19, 348, 4 2, 475, 4 16, 296, 2	56 52 59 58 58 57 55 58 59 57 55 50 50 50 50 50 50 50 50 50 50 50 50	16. 47 5. 23 6. 32 5. 12 5. 08 15. 95 7. 74 36. 18 6. 38 2. 75 2. 81 7. 95 16. 43 16. 50	0. 04 0. 14 0. 24 0. 24 0. 04 0. 15 0. 05 0. 11 0. 3 0. 3 0. 3	8 8, C 8 8, C 8 6 18, C 8 7 18, C 8	0.009 1.009	33 3.05 48 0.67 58 0.63 12 0.90 00 0.50 76 1.31 24 0.81 58 1.74 07 0.94 23 0.45 16 0.86 41 0.71	7	37 \$ 43 22 82 1 64 65 66 63 .46 67 9	13. 77 74. 79 42. 86 39. 98 28. 34 35. 21	34. 26 7. 90 8. 95 3. 32 42. 31 21. 76
Alaska Arizona California Colorade Georgia Idaho Maryland Michigan Montana Nevada New Mexico North Carolina Oregon South Carolina	. (a) (b) (c) (d) (e) (f) (g) (h) (h)	2 370 34 25 67 	40 12, 063 1, 253 20 3, 274 158 705	3 354 1,007 1,109 9 273 3 6 265 233 230 42 126 7	2, 639 916, 568 3, 254, 151 13, 960, 529 27, 641, 610 108, 069 6, 040, 641 10, 369 105, 925 20, 608, 287 9, 578, 536 2, 433, 233 150, 674 987, 691 47, 085	43, 44 4, 796, 21 20, 563, 3: 71, 434, 99 140, 313, 7' 1, 724, 1: 46, 735, 4: 375, 1' 676, 2 56, 570, 9 26, 867, 8 19, 348, 4 2, 475, 4 16, 296, 2 1, 226, 7'	56 52 79 38 38 75 53 32 75 12 73 71 99 97 97	16. 47 5. 23 6. 32 5. 12 5. 08 15. 95 7. 74 36. 18 6. 38 2. 75 2. 81 7. 95 16. 43 16. 50 26. 05	0. 06 0. 11 0. 16 0. 20 0. 21 0. 00 0. 11 0. 03 0. 31 0. 31	8 8, C 6 618, C 6	142 0. 109 1. 109 1. 109 1. 1555 1. 1332 2. 1474 0. 1884 1. 1001 0. 1883 1. 1557 2. 1556 1. 1557 0. 1658 0. 1795 0. 1781 0.	33 3.05 48 0.67 58 0.63 12 0.90 00 0.50 76 1.31 24 0.81 58 1.74 07 0.94 23 0.45 16 0.86 41 0.71 53 1.90 62 1.62	715. 6. 5. 2. 91 22. 1. 20. 4. 3532.	37 \$ 43 22 1	13. 77 74. 79 42. 86 39. 98 28. 34 35. 21	34. 26 7. 90 8. 95 3. 32 42. 31 21. 76 15. 98
Alaska Arizona California Colorade Georgia Idaho Maryland Michigan Montana Nevada New Mexico North Carolina Oregon South Carolina South Dakota	. (a) (b) (c) (d) (e) (d) (e) (f) (g) (h) (h) (i) (i) (d) (d) (d) (d) (e) (e) (f) (g) (h) (f) (f) (g) (h) (h) (h) (h) (h) (h) (h) (h) (h) (h	2 370 34 25 67 5 34	12, 063 1, 253 20 3, 274 158 705 399 339	3 354 1,007 1,109 9 273 3 6 265 233 290 42 126 7	2, 639 916, 568 3, 254, 151 13, 960, 529 27, 641, 610 108, 069 6, 040, 641 10, 369 105, 925 20, 608, 287 9, 578, 536 2, 433, 233 150, 674 987, 691 47, 085 3, 226, 468	43, 44 4, 796, 21 20, 563, 3: 71, 434, 9: 140, 313, 7' 1, 724, 1: 46, 735, 4: 375, 1' 676, 2 56, 570, 9 26, 867, 8 19, 348, 4 2, 475, 4 16, 296, 2 1, 226, 7 5, 844, 8	56 52 59 58 55 59 53 50 50 50 50 50 50 50 50 50 50	16. 47 5. 23 6. 32 5. 12 5. 08 15. 95 7. 74 36. 18 6. 38 2. 75 2. 81 7. 95 16. 43 16. 50	0.04 0.14 0.24 0.24 0.04 0.15 0.05 0.11 0.3 0.3 0.10	8	142 0. 109 1. 109 1. 1555 1. 1332 2. 1474 0. 1484 1. 1001 0. 183 1. 1557 2. 1755 1. 126 1. 1795 0. 181 0. 1988 0. 1988 1.	33 3.05 48 0.67 58 0.63 12 0.90 00 0.50 76 1.31 24 0.81 58 1.74 07 0.94 23 0.45 16 0.86 41 0.71 53 1.90 62 1.62 60 1.68	7.  —15. 6. 5. 2. —2. —2 1 20 4 3 —5. —3. —2. 10	37 \$ 43 22 1	13. 77 74. 79 42. 86 39. 98 28. 34 35. 21	34. 26 7. 90 8. 95 3. 32 42. 31 21. 76 15. 98
Alaska Arizona California Colorade Georgia Idaho Maryland Michigan Montana Nevada New Mexico North Carolina Oregon South Carolina South Dakota Texas	(a) (b) (c) (d) (d) (e) (f) (f) (h) (d) (e) (f) (d) (f) (d) (e) (f) (f) (f) (f) (f) (f) (f) (f) (f) (f	2 370 34 25 67 5 34 	40 12,063 1,253 20 3,274 158 705	3 354 1,007 1,109 9 273 3 6 265 233 200 42 126 7 71 31	2, 639 916, 568 3, 254, 151 13, 960, 529 27, 641, 610 108, 069 6, 040, 641 10, 369 105, 925 20, 608, 287 9, 578, 536 2, 433, 233 150, 674 987, 691 47, 085 3, 226, 468 425, 001	43, 44 4, 796, 21 20, 563, 37 71, 434, 90 140, 313, 77 1, 724, 11 46, 735, 44 375, 17 676, 2 56, 570, 9 26, 867, 8 19, 348, 4 2, 475, 4 16, 296, 2 1, 226, 7 5, 844, 8 454, 8	38 39 38 37 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16. 47 5. 23 6. 32 5. 12 5. 08 15. 95 7. 74 36. 18 6. 38 2. 75 2. 81 7. 95 16. 43 16. 50 26. 05 1. 81	0.06 0.19 0.10 0.20 0.20 0.01 0.01 0.03 0.11 0.03 0.30 0.00 0.0	8	142 0. 109 1. 109 1. 1555 1. 1332 2. 1774 0. 1884 1. 1001 0. 1883 1. 1557 2. 1755 1. 126 1. 1795 0. 1781 0. 1883 1. 1883 1.	33 3.05 48 0.67 58 0.63 12 0.90 00 0.50 76 1.31 24 0.81 58 1.74 07 0.94 23 0.45 16 0.86 41 0.71 53 1.90 62 1.62 60 1.68 25 0.86	715. 6. 5. 2. 911. 20 4. 353. 10 48	37 \$ 43 22 43 104 105	13. 77 74. 79 42. 86 39. 98 28. 34 35. 21 88. 19	34. 26 7. 90 8. 95 3. 32 42. 31 21. 76 15. 98 11. 20
Alaska Arizona California Colorade Georgia Idaho Maryland Michigan Montana Nevada New Mexico North Carolina Oregon South Carolina South Dakota Texas Utah	(a) (b) (c) (d) (e) (f) (f) (h) (i) (i) (i) (i) (i) (i) (i) (i) (i) (i	2 370 34 25 67 5 34	12, 063 1, 253 20 3, 274 158 705 399 339	3 354 1,007 1,109 9 273 3 6 265 233 290 42 126 7	2, 639 916, 568 3, 254, 151 13, 960, 529 27, 641, 610 108, 069 6, 040, 641 10, 369 105, 925 20, 608, 287 9, 578, 536 2, 433, 233 150, 674 987, 691 47, 085 3, 226, 468	43, 44 4, 796, 21 20, 563, 3: 71, 434, 9: 140, 313, 7' 1, 724, 1: 46, 735, 4: 375, 1' 676, 2 56, 570, 9 26, 867, 8 19, 348, 4 2, 475, 4 16, 296, 2 1, 226, 7 5, 844, 8	38 39 38 37 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16. 47 5. 23 6. 32 5. 12 5. 18 15. 95 7. 74 36. 18 6. 38 2. 75 2. 81 7. 95 16. 43 16. 50 26. 05 1. 81 1. 07	0. 06 0. 13 0. 10 0. 20 0. 22 0. 00 0. 11 0. 03 0. 11 0. 03 0. 11 0. 00 0. 00 00 0. 00 0. 00 00 00 00 00 00 00 00 00 00 00 00 00	8	142 0. 169 1. 16	33 3.05 48 0.67 58 0.63 12 0.90 00 0.50 76 1.31 24 0.81 58 1.74 07 0.94 23 0.45 16 0.86 41 0.71 1.90 62 1.62 60 1.68 25 0.80 07 0.48	715. 6. 5. 211 20 4 3 -5310 48	37 \$ 43 22 43 104 105	13. 77 74. 79 42. 86 39. 98 28. 34 35. 21 88. 19 47. 79 69. 49	34. 26 7. 90 8. 95 3. 32 42. 31 21. 76 15. 98 11. 29 3. 01 32. 14
Alaska Arizona California Colorade Georgia Idaho Maryland Michigan Montana Newada New Mexico North Carolina Oregon South Carolina South Dakota Texas	(a) (b) (c) (d) (e) (f) (h) (i) (i) (i) (k) (k)	2 370 34 25 67 5 34 	40 12,063 1,253 20 3,274 158 705	3 354 1,007 1,109 9 273 3 6 265 233 200 42 126 7 71 31	2, 639 916, 568 3, 254, 151 13, 960, 529 27, 641, 610 103, 069 6, 040, 641 10, 369 105, 925 20, 603, 287 9, 578, 536 2, 433, 233 150, 674 987, 691 47, 085 3, 226, 468 425, 001 9, 544, 680	43, 44 4, 796, 24 20, 563, 33 71, 434, 96 140, 313, 71 1, 724, 11 46, 735, 44 375, 11 676, 2 56, 570, 9 26, 867, 8 19, 348, 4 2, 475, 4 16, 296, 2 1, 226, 7 5, 844, 8 454, 8 64, 454, 5	66 66 66 67 67 67 67 67 67 67 67 67 67 6	16. 47 5. 23 6. 32 5. 12 5. 18 15. 95 7. 74 36. 18 6. 38 2. 75 2. 81 7. 95 16. 43 16. 50 26. 05 1. 81 1. 07 6. 75	0. 06 0. 13 0. 16 0. 20 0. 21 0. 06 0. 11 0. 03 0. 11 0. 06 0. 0 0. 0 0. 0 0. 0 0. 0 0. 0 0.	8	142 0. 169 1. 16	33 3.05 48 0.67 58 0.63 12 0.90 00 0.50 76 1.31 24 0.81 58 1.74 07 0.94 23 0.45 16 0.86 41 0.71 55 1.99 62 1.62 60 1.68 25 0.80 07 0.48 96 0.51	7	37 \$ 43 43 44 44 45 45 46 46 46 46 46 47 48 46 46 46 47 48 46 47 48 46 47 48 46 48 46 48 46 48 .	13. 77 74. 79 42. 86 39. 98 28. 34 35. 21 88. 19 47. 79 69. 49	34. 26 7. 90 8. 95 3. 32 42. 31 21. 76 15. 98 11. 29 3. 01 32. 14

a Windlasses and whims, 49.
b Water windlasses, etc., 439.
c Water, etc., 266.

d Water.

e Water windlasses, etc.
f Water whims, etc., 18.

g Water whims, etc., 50. h Whims, windlasses.

i Water, etc., 40.

j Windlass.

k Whims, etc.

l Water windlass and whims.

m Waterwheels, whims, and windlass.

# MINERAL INDUSTRIES IN THE UNITED STATES.

#### STATISTICS OF GOLD AND SILVER IN THE STATES OF THE APPALACHIAN RANGE.

			BULLION	PRODUCED	İ				EMPL	oyés ab	OVE GRO	UND.				
STATES.	Ore pro-	Ore sold or treated.		RE SOLD ED IN 1889.	Aver	age num	ber em pl	oyed.	Ave	rage wa	ges per i	lay.	Average	e numbe: during	r of days g year.	worke
	(Tous.)	(Tons.)	Gold. (Value.)	Silver. (Value.)	Fore- men or over- seers.	Me- chan- ics.	Labor- ers.	Boys under 16 years.	Fore- men or over- seers.	Me- chan- ics.	Labor- ers.	Boys under 16 years.	over-	Me- chan- ics.	Labor- ers.	Boys under 16 years
ALABAMA.																
Clay, Cleburne, and Talla- poosa counties, and un- distributed petty mining.	470	470	\$2, 539	\$100	3	3	. 4		<b>\$3.</b> 00	\$1.50	\$0.90		155	210	150	
GEORGIA	90, 694	78, 134	107, 605	464	22	22	152		1.33	1.47	0. 92		173	250	228	
Cherokec, Haralson, and McDuffie counties.	2, 817	2, 817	18, 160	5	1	11	25		1.33	1.50	1.05	•••••	160	276	230	
Lumpkin county	42, 450	34, 450	27, 182	282	9	3	35		1.30	1.38	0. 90		117	154	143	
White county	12, 500	12, 500	23, 318		4		37		1.40		0.86		303	•	300	]
Undistributed petty mining	32, 927	28, 367	38, 995	177	8	8	55		ļ		· · · · · · · · · · · · · · · · · · ·		. <b></b>			<b> </b> -
MARYLAND.																
Montgomery county	1, 150	1, 150	10, 369		2		50		2.25	• • • • • • •	1.05		249		257	
NORTH CAROLINA	20, 581	18, 821	146, 795	3, 879	21	53	230	16	2. 27	1.44	0.88	\$0, 32	242	193	179	243
Cabarrus county	1, 200		15, 500		1	1	8		2.80	1.35	0.90		312	240	288	
Mecklenburg county	520	60	1,533	20	2	5	13		2.40	1, 25	0.94		188	192	110	
Montgomery county	8,054	7,954	24, 518	406	4	10	32		1.75	1.62	0.91		300	152	213	
Clay, Cleveland, Franklin, Moore, Randolph, Rowan, Stanly, and Union coun-	9, 807	9, 807	58, 953	962	7	21	102	12	2. 49	1.39	0, 86	0. 32	236	220	171	243
ties.  Davidson, Guilford, and Henderson counties.	1,000	1,000	733		1	2	13		2.00	1.50	0.85		90	100	156	······
Undistributed petty mining			45, 558	2, 491	б	14	62	4		. <b></b>						
South Carolina	10, 250	10, 250	46, 853	232	7	18	114	1	3. 02	2.54	0. 99	0, 50	65	113	92	26
Chesterfield, Lancaster, Pickens, Union, and York counties.	10, 250	10, 250	42, 273		7	13	64	1	3. 02	2.54	0, 99	0.50	d5	113	02	26
Undistributed petty mining			4,580	232		••••	50							·		
Virginia.																
Buckingham, Culpeper, Fluvanna, Orange, and Stafford counties, and un- distributed petty mining.	<b>G</b> 00	600	4, 100	13	2		30		1.38	· · · · · · · · · · · · · · · · · · ·	1.00	<b>-</b>	50	,	70	

# STATISTICS OF GOLD AND SILVER IN THE STATES OF THE APPALACHIAN RANGE—Continued.

					EMPLOY	ÉS BELOW G	ROUND.					
STATES.	A	verage num	iber employe	ed.		Average wa	ges per day.		Average	number of	days work	ted during
	Foremen or overseers.	Miners.	Laborers.	Boys under 16 years.	Foremen or overseers.	Miners.	Laborers.	Boys under 16 years.	Foremen or over- seers.	Miners.	Laborers	Boys under 16 years.
ALABAMA.						* The control of the second of		-				
Clay, Cleburne, and Talla- poosa counties, and un- distributed petty mining.	1	7	6		<b>\$3.</b> 00	<b>\$1.</b> 25	\$0.83		210	165	137	
Georgia	17	41	93		1.60	1.05	0.80		145	179	212	
Cherokee, Haralson, and McDuffie counties.	4	11	7		2.30	1. 20	0.82		200	200	200	
Lumpkin county	7	8	32		1.20	0.85	0.80		118	150	160	
White county			20				0.80			•	300	
Undistributed petty mining	6	22	34									*********
MARYLAND.								-				
Montgomery county		2	10			1. 50	1. 25			250	260	
NORTH CAROLINA	18	238	178		2. 26	1. 02	0.85		197	155	205	
Cabarrus county	1	10	6		2,50	1.10	0.90					
Mecklenburg county	2	34	10		2.00	1. 24			312	216	216	· •
Montgomery county	5	66	36		2.50	0.86	0. 92 0. 80		104	134	175	• • • • • • • • • •
Clay, Cleveland, Franklin, Moore, Randolph, Rowan Stanly, and Union coun- ties.	5	63	69		2.07	1,04	у. 84		201 208	140 174	. 279 185	********
Davidson, Guilford, and Henderson counties.		1	9			1, 50	1.00			90	90	
Undistributed petty mining	5	64	48		·····.							
SOUTH CAROLINA	2	34	20		3.10	1. 15	0.90		73	70	24	
Chesterfield, Lancaster, Pickens, Union, and York counties.	2	34	20	*****	3.10	1. 15	0.90		73	70	24	
Undistributed pettymining					· · · · · · · · · · · · · · · · · · ·							
Virginia.							7 - 27					ORGANOTIC - sab biodynamic propagation of the control of the contr
Buckingham, Culpeper, Fluvanna, Orange, and Stafford counties, and un- distributed petty mining.									-			

### STATISTICS OF GOLD AND SILVER IN THE STATES OF THE APPALACHIAN RANGE—Continued.

			R OF MI DUCING-	GES PRO-					XPENDITUR	es.			
	Total pro- ducing		1		Mines working but non-	(		,			Offic	e force.	
STATES.	mines re- ported.	Less than \$1,000.	to	\$10,000 to \$50,000.	produc- tive.	Grand total of expendi- tures.	Grand total of wages.	Total wages paid in 1889.	Paid to con- tractors.	Ma	les.	Fen	ales.
		<b>#1,000.</b>	, p10,000.	φυσ, σσο.		, market				Number.	Wages paid.	Number.	Wages paid.
Alahama. Clay, Cleburne, and Talla- poosa counties, and un- distributed petty mining.	:	2	1			\$8,042	\$7,588	\$6, 363			\$1, 225		
GEORGIA	15	5	7	5	3	141, 474	90, 474	77, 070	\$958	16	12, 446		
Cherokee, Haralson, and McDuffie counties.	3	1	1	1		49, 680	26, 129	22, 001		6	4, 128		
Lumpkin county	9	4	4	1	2	20, 241	14,218	12,408	310	1	1,500		
Whitecounty	3		2	1	1	20, 190	17, 280	14,680	300	3	2, 300		
Undistributed petry mining				] [*******		51.363	32, 847	27, 981	348	G	4, 518		
MARYLAND.		7777777		)		<del></del>	A STATE OF THE STA						
Montgomery county	2	1	1			18, 001	13, 800	12,800		1	1,000		
North Carolina	17	4	9	4	7	285, 795	195, 614	153, 439	13, 945	27	28, 230		
Cabarras county	2	1		1		13,950	8,000	8,000					
Mecklenburg county	3	2	1	) 		21,385	14, 116	11,766		3	2, 350		
Montgomery county	4		3	1		66, 267	44,523	26, 745	6, 923	6	10, 855	<b>]</b>	! *
Clay, Cleveland, Franklin, Moore, Randolph, Rowan, Stanly, and Union coun- ties,	8	1	5	2	3	102, 662	72, 365	64, 208	3, 256	. 9	4, 901		
Davidson, Guilford, and Henderson counties.					4	4, 346	3, 780	1,280		2	2,500		·
Undistributed petty mining						77, 185	52, 830	41,440	3, 766	7	7,624		
South Carolina	5		1	1	2	79, 098	37,078	33, 078		2	4,000		
Chesterfield, Lancaster, Pickens, Union, and York counties.	1			1	2	74, 348	32, 524	28, 524		2	4, 000		
Undistributed petty mining	1	*******	1			4, 750	4, 554	4, 554			• • • • • • • • • • • • • • • • • • • •		
VIRGINIA.  Buckingham, Culpeper, Fluvanna, Orange, and Stafford counties, and un- distributed petty mining.	3	3	- La Commence	**************************************	4	2, 875	2, 400	2, 100		1	300		

#### STATISTICS OF GOLD AND SILVER IN THE STATES OF THE APPALACHIAN RANGE—Continued.

	EXPENDITUR	Es—continued.			Y.	ALUE OF MIR	NING PROPER	ry.		
STATES.	Value of supplies.	Other expenditures.	Total value of plant.	Value of build-ings.	Value of of rail- roads on surface.	Ma- chinery.	Under- ground improve- ments.	Mine sup- plies.	Mine proper.	Cash.
ALABAMA.  Clay. Cleburne, and Tallapoosa counties, and undistributed petty mining.	\$335	\$119	\$35, 000	\$1,400	\$1,050	<b>\$20, 46</b> 5	\$4,353	\$287	<b>\$</b> 6, <b>3</b> 95	\$1,050
Georgia	18, 634	32, 366	1, 504, 758	12, 815	9, 420	37, 964	96, 896	8, 097	1, 337, 376	2, 280
Cherokee, Haralson, and McDuffie counties.	4, 279	19, 272	210, 951	5, 119	1,000	14, 831	59, 217	5, 000	124, 332	1, 452
Lumpkin county White county	5, 090 2, 500	933 410	307, 500 440, 000	2, 100 950	5, 000	9, 350	2, 500	100	293, 450 434, 050	
Undistributed petty mining		11,751	546, 307	4, 646	3, 420	13, 783	35, 179	2, 907	485, 544	828
MAEYLAND.					Property of the State of Control					
Montgomery county	2,632	1, 569	370,000	1, 000	085	1, 965	16, 825	750	348, 775	
NORTH CAROLINA	64, 731	25, 450 ·	2, 173, 993	58, 540	6, 603	168, 325	404, 328	8, 652	1, 494, 026	33, 519
Cabarrus county	4,000	1,950	17, 000	5, 000		2,000			10,000	
Mecklenburg county	5, 562	1,707	132, 800	1,875	540	8,700	55, 490	400	65, 285	600
Montgomery county	11,426	10, 318	330, 390	11, 555	1,480	51,749	64, 830	2, 365	198, 420	
Clay, Cleveland, Franklin, Moore, Randolph, Rowan, Stanly, and Union coun- ties.	25, 841	4,456	861, 666	15, 300	2, 500	38, 825 •	132, 400	3, 200	645, 575	23, 866
Davidson, Guilford, and Henderson counties.	420	146	245, 00Ó	9, 000	300	21, 600	42,500	350	171, 250	
Undistributed petty mining	17, 482	6, 873	587, 137	15, 810	1, 783	45, 460	109, 198	2, 337	403, 496	9,053
SOUTH CABOLINA	11, 052	30, 968	1, 148, 050	15, 125	12,000	18, 125	. 67, 000	4, 500	1, 031, 300	
Chesterfield, Lancaster, Pickens, Union, and York counties.	10, 856	30, 968	1, 148, 050	15, 125	12, 000	18, 125	67, 000	4, 500	1, 031, 300	
Undistributed petty mining	196									
VIBGINIA.										
Buckingham, Culpeper, Fluvanna, Orange, and Stafford counties, and un- distributed petty mining.	175	300	50, 000	2,500		2, 500	5, 090	2, 000	38,000	

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# MINERAL INDUSTRIES IN THE UNITED STATES.

### STATISTICS OF GOLD AND SILVER IN THE STATES OF THE APPALACHIAN RANGE—Continued.

	VALUE	OF MILL OR	REDUCTION	works.			2	MOTIVE PO	WER.			l
STATES.					Boi	ers.	Eng	ines.		Мо	tors.	Number of
	Total.	Buildings.	Machinery.	Supplies.	Number.	Horse power.	Number.	Horse power.	Other power.	Number.	Horse power.	anima <b>l</b> e,
ALABAMA.						***************************************						
Clay, Cleburne, and Talla- poosa counties, and un- distributed petty mining.	\$8, 456	\$700	<b>\$6,</b> 650	\$1,106	ı	14	1					
GEORGIA	219, 411	32, 540	185, 222	1, 649	9	369	7	283		25	20	
Cherokee, Haralson, and McDuffie counties.	48, 152	15, 876	31, 776	500	4	155	5	100	Water	2	20	1
Lumpkin county	78,600	3,950	74, 200	450	2	80	2	80	Water	14		} <i>.</i>
White county	13,000	900	12,000	100								,
Undistributed petty mining	79, 659	11,814	67, 246	599	3	134		103		9		
MARYLAND.												
Montgomery county	5, 175	1, 500	3, 675	· • • • • • • • • • • • • • • • • • • •	2	100	1					3
NORTH CAROLINA	301,414	52, 334	244, 271	4, 809	89	4, 113	47	2, 415		14	399	42
Cabarrus county	3, 000		3, 000		3	140						
Mecklenburg county	11, 800	300	11, 250	250	7	202	5	190				
Montgomery county	68, 260	12, 200	55, 400	660	18	918	2	272				18
Clay, Cleveland, Franklin, Moore, Randolph, Rowan, Stanly, and Union coun- ties.	54, 450	12, 200	40, 150	2, 100	29	1,327	22	1, 121		9	256	13
Davidson, Guilford, and Henderson counties.	82, 500	13, 50 <b>0</b>	68, 500	500	8	<b>4</b> 15	5	180		1	35	
Undistributed petty mining	81, 404	14, 134	65, 971	1, 299	24	1, 111	13	652		4	108	11
SOUTH CAROLINA	78, 725	9, 000	68, 225	1, 500	12	595	4	210				7
Chesterfield, Lancaster, Pickens, Union, and York counties.	78, 725	9, 000	68, 225	1, 500	12	595	4	210				7
Undistributed petty mining												
Virginia.												
Buckingham, Culpeper, Fluvanna, Orange, and Stafford counties, and un- distributed petty mining.	7, 500	2, 000	5, 000	500	4	145	3	125				2

### GOLD AND SILVER STATISTICS OF ALASKA.

				PRODUCED					EM	PLOYÉS	ABOVE	GROUN	D.					
MINING DISTRICTS, ETC.	Ore pro- duced.	Ore sold or treated.		E SOLI OR O IN 1889.	1	ge numl	ber emp	loyed.	A	verage	wages p	er day				numb		
	(Tons.)	(Tons.)	Gold. (Value.)	Silver. (Value.)	Fore- men or over- seers.	Me- chan- ics,	Labor- ers.	Boys under 16 years.	Foremen over	or cha	n- Litt	or- u	lovs nder 16 cars.	Fore- men or over- seers.	cl.	Me- lan- es.	Labor- ers.	Boys under 16 years.
Total	218, 232	216, 612	\$904, 650	\$11,918	16	21	158		\$5.5	50 \$5.	60 \$2	. 62		238		305	285	
HarrisSheep Creek	' '	216, 612	479, 850 3, 000	4, 918 7, 000	12	16	118		5. 5	50 5.	00 2	82		238		805	285	
Silver Bow Basin placer Yukon Union and Yukon placers.			25, 800 96, 000			5	40											
Undistributed gold			100,000	1	1)					-	-							
							EMPLOYÉ	S BELOV	W GROU	IND,								
MINING DISTRICTS, ETC.		Average	number e	mployed.			Av	erage w	ages pe	er day.		A	verag	e namp		days w	orked	during
	Foremen overseer	or 8. Min	ers. La	borers.	Boys under 16 years.	Forem overs		Miners.	Lal	borers.	Boys under years	16 0	oreme r ovei seers.	· Mir	iers.	Labo		Boys inder 16 years.
Total		9	127	55	******	<b>\$</b> 4	1.86	<b>\$3.6</b> 0		<b>≵2.</b> 00		•••	360		300	2	82 .	
Harris		7	95	41			1.86	3, 60		2.00			360		300	2	282	
Sheep Creek	1			į			1				ļ							
Silver Bow Basin placer	{			[			- 1				1	ll.		1.			ļ	
Yukon Union and Yukon placers. Undistributed gold	}	2	32	14						• • • • • • • •								
		NUM	BER OF MI	NES PRODU	cing—	<u>                                     </u>		Ī	1		j ·	EXP	ENDIT	URES.				
MINING DISTRICTS, ETC.	Total pro ducing mines re	1	\$1,000	\$10,000		Mines workin but nor	g Tot	ber 6	rand	Grai		otal		ice forc Males.)				Other
•	ported.	than \$1,000.	\$10,000.	to \$50,000.	Over \$50,000.	produc tive.	> repor	ex	tal of pendi- ures.	total	of pa	ages id in 889.	Num ber.			Value suppl	iae   t	xpendi- tures.
Total	5	2	1	. 1	1		7	12 \$6	18, 009	\$315,-	198 \$30	4, 731	4	\$10,	767	\$301,	236	\$1, 275
Harris	5	2	1	1	1		7	12 4	63, 506	236,	623 22	8, 548	3	8,	075	225,	927	956
Yukon Union and Yukon placers. Undistributed gold	}	1					•	1	54, 503	78,	875 7	6, 183	1	2,	692	75,	309	316
			VALU	E OF MINI	G PROPE	RTY.	· · · · · · · · · · · · · · · · · · ·		V.	ALUE OF	MILL OR	REDUC	TION	Works.	1	· MOTIV	E POW	EB.
MINING DISTRICTS, ETC.	Total	Valu			Under-	Mine				-					В	oilers.	E	ngines.
	value of plant.	of hail	d- roads	ery.	ground improve- ments.	sup- plies.	Mine prope		sh. T	Cotal.	Build- ings.	Mac er		Sup- plies.	No.	Horse	No	Horse power.
Total	\$4, 239, 9	55 \$41,7	78 \$16,633	<b>\$148,</b> 067	<b>\$155, 343</b>	\$83,000	<b>\$</b> 3,778 <b>,</b> 4	\$16,	667 \$5	56, 307	<b>\$53,788</b>	\$465,	719	36, 800	2	36	0 2	300
Harris	3, 181, 6	30 31,3	13, 300	111, 050	117, 339	62, 250	2,833,8	850 12,	500 4	17, 230	40, 341	349,	289	27, 600	2	36	0 2	300
Silver Bow Basin placer Yukon Union and Yukon placers. Undistributed gold	1, 058, 3	25 10, 4	3, 333	37, 017	38, 004	20, 750	944, 6	117 4,	167 12	39, 077	13, 447	116,	430	9, 200	ļ			

# GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES.

#### ABIZONA.

COUNTIES.	Total amount of ore	Total amount of	Total amount of	ASSAY VALUE	OF ORE SOLD.	TOTA	L BULLION VALU	re.	ESTIMATE VALUE OF IN DUCED FROM	CLLION PRO-
,	produced. (Short tons.)	ore sold. (Short tons.)	ore treated. (Short tons.)	Gold.	Silver.	Grand total bullion.	Gold.	Silver.	Gold,	Silver.
Total	104, 554	17, 243	34, 221	\$406, 474	\$1, 555, 225	\$3, 254, 151	\$910, 174	\$2, 343, 977	\$386, 151	\$1, 477, 465
Cochise	22. 895	3, 843		47,758	407, 470	811,675	62, 370	749, 305	45, 370	387,097
Gila	176	94	79	252	24,810	61,865	240	61, 625	240	23,570
Graham	120	120		720	4,800	5, 244	684	4, 560	684	4,560
Maricopa	5, 562		5, 137			41, 166	39, 849	1, 317		• • • • • • • • • • • • • • • • • • • •
Mohave	3, 079	1, 238	1, 316	13, 625	209, 788	<b>26</b> 0, 290	42, 799	217, 491	12, 944	199, 299
Pima	35, 893	3, 341	12, 961		390, 470	738, 316	57, 306	681, 010		370, 947
Pinal	8, 721	336	7, 401	1,800	76, 559	194, 135	1,710	192, 425	1,710	72,731
Yavapai	24, 988	7, 351	5, 077	342, 319	355, 636	809, 758	454, 921	354, 837	325, 203	337, 854
Yuma	3, 120	870	2, 250		85, 692	181,702	100, 295	81, 407	[]	81, 407
Undistributed gold	. <b></b>			[		150, 000	150, 000			

	COINING VAI LION PROD ORE TR		PLACER	BULLION.	Total pro- ducing			NUMBER (	of Mines pr	oducing—		
COUNTIES.	Gold.	Silver.	Gold.	Silver.	mines reported.	Less than \$1,000.	\$1,000 to \$10,000.	\$10,000 to \$50,000.	\$50,000 to \$100,000.	\$100,000 to \$250,000.	\$250,000 to \$500,000.	Over \$500,000.
Total	\$258,370	\$914, 040	\$60, 495		154	26	82	34	7	4	1	***************************************
Cochise		362, 208 38, 055			13 5	1	5 2	3 2	3	1	1	
Graham Maricopa Mohave	34, 649	1, 317 18, 192	5, 200		1 7 25	2 8	1 4 12	1				
Pima	2, 148	357, 591 119, 694	{		8 6	1	1 4	4	1	I 1	 	
Yavapai Yuma	45, 000	16, 983	55, 295		84 5	14	53	16 4	1	1		
Undistributed gold			***********						•••••			

					E3	(PLOYÉS ABO	VE GROUNI	D.				
.COUNTIES.	A	verage num	ber employe	d.		Average was	ges per day	7.	Average n	umber of day	s worked d	uring year.
	Foremen or overseers.	Mechanics.	Laborers.	Boys under 16 years.	Foremen or overseers.	Mechanics.	Laborers.	Boys under 16 years.	Foremen or overseers.	Mechanics.	Laborers.	Boys under 16 years.
Total	64	118	703	2	<b>\$4.</b> 59	\$3.89	\$2.46	\$1,50	219	187	205	145
Cochise	6	28	49		5, 50	4. 13	2. 62		340	308	248	
Gila			10				3, 00			••••	60	
Maricopa		7	42		4.67	3.67	2.63		293	216	284	
Mohave	6	. 4	15		5.33	4.00	3. 10		196	257	190	
Pima	26	26	185		4. 20	4.00	2, 12		210	82	190	
Pinal	3	16	33		4.17	3.75	2.41		164	170	206	
Yavapai	16	28	53	2	4.63	3.95	2.90	1.50	176	166	197	145
Yuma		9	20			3.00	3.00			150	180	
Undistributed gold	*********	•••••	296				2.46				205	

## GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued.

ARIZONA—Continued.

Market and the second of the s				and the second s	EMI	PLOYÉS	BELOW	GROL	ND.										
COUNTIES.	Aver	age nun	ber en	ployed.	A	rerage	wages p	er da	y.	Avera	ge num dur	ber of e		vorked	Total number	Num of pro-	luc-	Mines working but non-	Number of mines idle.
	Foremen or over-seers.	Miners.	Labor ers.	Boys under 16 years	r men or over-	Mine	ers. Lal		Boys under 16 years.	Fore- men or over- seers.	Mine		bor- rs.	Boys under 16 years.	of mines.	min		pro- ductive.	Idle.
Total	34	1, 467	132	1	\$4.44	<b>\$3.</b> 1		24	\$1.50	193	21	5	199	89	192	1	54	14	24
Cochise	8	233	3		5.13	1		00 .		251	29	7 :	338		21		13	4	4
Gila	i	38	· - <b>-</b> · · · ·	• • • • • • • • • • • • • • • • • • • •		3.0	9	-			_ 23	1	-		9	ļ!	5	2	2
Graham	1	10	ļ. <b></b> .				1				. 10				1		1 .		
Maricopa	1'	205	22		4	3.1		1	•••••		. 14		309 .		11		7 25 .	2	. 2
Mohave Pima	10	133 296	15 55		1	1	i	i		260 105	21 19		207 .	•••••	25 12		8	2	2
Pinal	3	290 75	: 21		4.66		1			251	25	1	133 . 218 .		12		6	1	5
Yavapai	_	395	16	1		i	İ	1	1, 5C	197	22	- 1	230	89	96	İ	84	3	9
Yuma	ì	82			4.00	1	!		1.00	150	19			C.D	5		5		
Undistributed gold																			
							1												<u> </u>
					EXP	ENDITU	RES.								VALUE OF	MININ	F PRO	PERTY.	
				THE CONTRACTOR OF THE PARTY.			Office	force	2.		1			·			-		
COUNTIES.	Grand total of penditu	ex- to	rand al of ages.	Total wages pa in 1889		М	ales.	F	emales.	BL	лр∙   е	Other expend- itures.		il value plant.	Value of buildings.	Value railro on su	ads ir-	Machin- ery.	Under- ground improve- ments.
					OIA.	Num- ber.	Wages paid.	Nur ber		s						face			шентя.
Total	\$2, 058,	039 \$1,5	99,259	\$1, 499, 64	\$48, 902	30	\$50,716			\$348	, 662 \$	110, 118	\$19, 7	3 <b>4</b> , 884	\$207, 264	\$17,8	300	\$169,497	\$1, 906, 560
Cochise	453,	919 32	7, 789	311, 58	5,000	8	11,205			71	, 873	54, 257	1, 5	46, 850	64,600	2, 9	950	58, 400	146,000
Gila	31,	837 2	7, 837	27, 83	7					2	750	1,050	2	29, 700	4, 000			19, 200	33, 000
Graham		- 6	3, 000	3, 00	0								. <b> </b>						
Maricopa	227,	- 11	4, 227	140, 54	1	2	15, 849			- 11	, 270	8, 800	2, 9	76, 600	24, 200	4,4	100	27,500	118, 800
Mohave	143,	- 1	8, 183	128, 18	į					15	, 355	7, 898	1	39, 763	14, 275	2, 5	200	42, 400	106, 800
Pima	341,	3	7, 132	256, 19		8	8, 996	ļ		il '	, 099	6, 461		88, 304	46, 514		ı	155, 857	972, 400
Pinal	184,	11	8,656	100, 78	i	6	7,875		•-	II .	, 690	6, 709	1	82, 550	14, 700		100	18,850	102,000
Yavapai Yuma	451, 0 71, 9	15	9, 345 3, 090	318, 42 63, 69	, ,	C	6, 800			1)	, 025	23, 643	1	71, 117	34, 725	. 8,1	50	136, 090	409, 560
Undistributed gold	150, (	- 17	0,000	150, 00							, 600	1,300		600,000	4, 250			11, 200	18,000
	VALUE (	OF MININ		ERTY—	VALUE OF	MILL	R REDIO	TION	WORKS.	Ī			<u>'</u>	OTIVE	POWER.	!	1		i i
		contin	шеп.				1			ļ		11 _					1		Number
COUNTIES.	Mine supplies	Mir prop		Cash.	Total.	Build ings		chin-	Sup- plies.	ļ	ilers.	-	ngine.		Other por	ver.		Iotors.	of ani- mals.
,										Num- ber.	Horse power	Nun ber					Nun ber.	Horse power.	
Total	\$105, 370	\$17,018	.293	\$10, 100	\$828, 495	\$198, 0	60 \$583	5, 835	\$14. <b>6</b> 00	88	2, 563	60	1,	030			2	40	35≴
Cochise	2, 390	1, 267,	510	5, 000	56, 900	8,5	00 47	7, 500	900	18	510	14	1 2	96 {   7	Vhims, 31. Vindlasses,	3	}		4
Gila		. 172,	500	1,000	23, 000	1, 0	00 20	. 660	2,000	[			.	14	Vhim, 1		}		1
Fraham		_										ii.			Vindlasses,	3	٠. ر		1
1		. 2, 801,	700		180,400	26, 4	00 147	400	6, 600	15	299	13	9	96 V	indlass, 1		• • • • •		
Mohave	38, 400				75, 400	24, 2		, 000	12, 200	7	301	-1	1	- 3	rindlasses, r Findlasses,	1			11. 34.
		1		ļ					i					- 11	indlasses,		1	-	34:
ima	4, 173	5, 209,	360		138,060	45, 7	60 88	400	3, 900	23	546	13			7hims, 8		}		83
		1		l	:		Ì		ì	1		1			Thips. 5		) -		] "
				Į	1				,				İ		indlass, 1.		1.		I
Pinal	5, 000	2, 941,	900		88,000	16, 0	00   68	,000	4,000	2	150	2		1 1	Thim, 1		}		72
i		:	į	l	4									l l	oist, 1	1	j		l
čavapai	55, 407	3, 723,	085	4,100	260, 735	75, 20	00   170	, 535	15, 000	20	661	11	4		hims, 9		} 2	40	149
čuma	<b></b>	. 266,	550		6,000	1, 00	00 5	. 000		3	90	1 .			heel, 1		, -	10	120
						-,					συ	. 1	1	"	indlass, 1.				•
			1							1		-	1						

### GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued.

#### CALIFORNIA.

COUNTIES.	Total amount of ore pro-	Total amount of	Total amount of	ASSAY VALUE	of ore sold.	TOT	AL BULLION VAL	UE.	ESTIMATE VALUE OF B DUCED FRO	D COINING CLLION PRO M ORE SOLD
	duced. (Short tons.)	ore sold. (Short tons.)	ore treated. (Short tons.)	Gold.	Silver.	Grand total bullion.	Gold.	Silver.	Gold.	Silver.
Total	1. 032, 124	4, 721	996, 114	\$203, 969	\$149, 121	\$13, 960, 529	\$12, 586, 722	\$1, 373, 807	\$193, 866	\$141,66
Alpine										
Amador			171, 559			911, 252	\$08, 246	3, 006		
Butte		6	7, 506	42	137	301, 592	300, 680	912	39	13
Calaveras		116	113, 079	7, 155	3, 755	736, 881	733, 058	3, 823	6, 797	3,56
Colusa	1	1.0	290	1, 100	0,	4, 187	4, 061	126	0, 151	0,00
Del Norte	1		2.00			17, 400	17, 400	120		
Eldorado		23	5, 712	2, 639	3	183, 575	183, 210	365	2, 597	
Fresno		<b>6</b> 50	14, 359	20, 920	23.430	207, 523	180, 210	26, 826	19, 874	
Humboldt	:	000	14, 500	29, 520	29. 400	78, 847	78, 709	138	10,014	22, 25
Invo	3, 288	1.434	1, 311	22, 316	105, 938	148, 025		104, 380	21, 200	100 00
Kern		2, 707	2, 419	645	18	60, 750	43, 645	278	613	100, 64
Lassen		-	1, 721	040	19	22, 700	60, 472	674	010	. 1
Los Angeles			5, 200			79, 109	22, 026	1 - 1		
Mariposa			981				78, 609	509_		
Merced	1		391			20, 652	20, 052			
Mono	3	353	11, 680	8,702	4, 755	100	100	OF 000	0.007	
Monterey		0,00	259	0, 102	4, 135	296, 398	180, 408	25, 990	8, 267	4, 517
Napa	1		2, 100			3, 600	3, 600			
Nevada		1, 015	192, 127	51, 653	***************************************	50, 206	307	49, 899		
Orange	10	1,013	185, 121	ə1, oəə   -	1.000	2,006,757	1, 967, 649	39, 108	49, 070	
Placer	152, 176	30	151, 637	* ***	1,000	950		950		950
Plumas	73, 102	39	69, 958	1, 113	557	1, 215, 594	1, 211, 269	4, 385	1,057	530
Sacramento	70, 102		09, 958		***********	499, 430	499, 077	353		•••••••
San Bernardino	73, 217	244	72, 778	4 62-		166, 090	166, 000			
San Diego	8, 137	444	8, 069	1, 285	6, 648	1, 108, 222	2, 821	1, 105, 401	1, 221	6, 316
San Luis Obispo	6, 101		8,000		• • • • • • • • • • • • • • • • • • • •	251, 073	251, 071	2		
Santa Barbara			••••••		• • • • • • • • • • • • • • • • • • • •					· · · · · · · · · · · · · · · · · ·
Shasta	28, 179	211	61 O.C		6 220	7, 045	7, 045			
Sierra	97, 186	614	24, 845	71 117	2, 880	332, 996	328, 964	4, 032	67, 658	2, 734
Siskiyou	9, 674		93, 256			1, 329, 192	1, 327, 290	1,902		
Stanislaus	5,074	************	9, 422			808, 198	807, 910	288	• • • • • • • • • • • • • • • • • • • •	
Frinity	15, 485		15 00-	•••••••••••••••••••••••••••••••••••••••	•••••	15, 955	15, 955			
Tulare	876		15, 327			683, 542	683, 427	115		
Tuolumne	19, 657	004	876			17, 110	17, 109	1		
Ventura	820	224	18, 181	16, 382	•••••••••••••••••••••••••••••••••••••••	228, 550	228, 337	213	15, 563	
Yuba	820   . 959   .		620			6, 831	6, 831			
Indistributed pla-	909		950	•••••••••••••••••••••••••••••••••••••••		98, 513	98, 373	140		
cer gold.	• • • • • • • • • • • • • • • • • • • •					2, 152, 374	2, 152, 374		i	

## GOLD AND SILVER.

### GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued.

CALIFORNIA-Continued.

	LION PROD	LUE OF BUL- UCED FROM BEATED.	PLACER E	CLION.	Total pro- ducing			NUMBER (	OF MINES PR	oducing—	:	
COUNTIES.	Gold.	Silver.	Gold.	Silver.	mines re- ported.	Less than \$1,000.	\$1,000 to \$10,000.	\$10,000 to \$50,000.	\$50,000 to \$100,000.	\$190,000 to \$250,000.	\$250,000 to \$500,000.	Over \$500,000.
Total	\$6, 635, 612	\$1, 230, 682	\$3, 604, 962	<b>\$1</b> , <b>4</b> 31	1, 359	627	580	102	18	21	6	
Alpine												
Amador	905, 804	2, 993	2,442	13	18	3	5	2	4	4		
Butte	52, 261	782	248,380		147	87	* 56	4				
Calaveras	635, 089	251	91,172	5	29	8	11	G	2	1	1	
CoInsa	4,061	126			1		1					
Del Norte			17,400		3	1	2	- <b></b>	<b></b>		[	l
Eldorado	77, 289	362	103,414		66	40	24	2		l. <b></b>		1
Fresno	169, 823	4, 567	1		21	6	9	4	1	• 1		
Humboldt			78,709	138	30	15	13	2		 		
Inyo	22, 445	3, 739	1		35	17	12	1	1	2	1	
Kern	58,007	261	1,852		32	19	13	-	-	_	1	
Lassen	27, 026	674			7	2	5					
Los Angeles	73, 609	590			. 2	-		2				
Mariposa			3, 785		21	14	7	- 1				
Merced			100		1	1	'					
Mono	172, 141	21, 473	100		9	2	6			1		
Monterey	3, 600	21, 410			1	-	1		• • • • • • • • • • • •	1		
Napa	307	49. 899			1		.  -					
Nevada	1,715,248	38, 931	203, 331	177	58	10	60		1 2			
Orange		30, 331	200, 001	111	1	10	32	7	2	5	2	
Planer	748, 121	3, 840	462, 031	15	11		1 .					
Plumas	497, 793	123	91, 284	230	74	23	32	13	3	2	1	
Sacramento	201, 100	1.00	166, 000	230	39	15	20	3			1	
San Bernardino		1, 099, 085	1, 600		50	20	28	2				·
ian Diego	251, 071	1,099,085	1, 699		14	3	7	2 .		1		. 1
an Luis Obispo	231.011	2			4	2	1 .			1		· · · · · · · · · · · · · · · · · · ·
anta Barbara									· • • • • • • • • • • • • • • • • • • •			
hasta	950 970	1 000	7, 045	•	2		2 .	•••••••••••				
ierra	259, 316	1,268	2, 080		:10	16	8	5	1 .			
	319, 452	1, 213	1,007,838	689	136	70	50	12	2	2		
iskiyou	160, 441	274	647, 469	14	264	121	133	10 .				
tanislaus	DOT 305		15, 935		2	1  -		1 .				
rinity	367, 835	115	315, 592		193	112	68	11	1	1		
Iulare	17, 109	1			3	2 -		1 ].				· · · · · · · · · · · · · · · · · · ·
nolumne	167, 789	203	44, 985	10	38	8	20	10 .				·
entura	6, 831	·····			2		2 .					
uba	5, 875	[]	92, 498	140	25	9	14	2 .				
Indistributed pla- cer gold.	!-		·   ·			. <b></b>						
· · · Millie.			1		ii.	i	ì		İ	1		

### GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued.

#### CALIFORNIA-Continued

	!				E	IPLOYÉS ABO	VE GROUND.					
COUNTIES.		Average num	ber employe	d.		Average was	ges per day.		Average n	umber of day	s worked d	uring year
	Foremen or overscers.	Mechanics.	Laborers.	Boys under 16 years.	Foremen or overseers,	Mechanics.	Laborers.	Boys un- der 16 years.	Foremen or overseers.	Mechanics.	Laborers.	Boys nn- der 16 years.
Total	565	660	6, 231	21	\$3.30	<b>\$3.26</b>	<b>\$2.0</b> 5	\$1.29	182	196	147	12
Alpine			2				2. 00				12	
Amador	17	46	116	3	3.85	2.98	2.58	1.08	278	294	218	26
Butte	11	13	71		3.12	3, 60	2. 91		231	154	114	
Calaveras	15	48	54	1	3.44	3.28	2.37	1.50	248	188	204	. 5
Colusa	Ì		1				2.50				300	
Del Norte			1				2, 50				150	
Eldorado	36	48	165	3	2.99	3.01	2, 23	1.50	190	165	89	15
Fresno	4	28	57		3.75	3.65	2.78		153	202	189	
Jumboldt	14		78		2.44		1.96		73		176	
nyo	12	10	49		5, 16	4. 93	2.83		179	131	91	
Cern	10	5	23	2	3.09	3.00	2.22	1.75	158	138	115	6
assen	1		2		3,00	D. 00	1. 92	1,,,,	300	100	90	
os Angeles	5	3	5		3.56	3, 00	2.40		322	245	311	í
dariposa	1	3	15	2	3, 50	3. 50	2.40	1,00	270	270	98	15
derced	•	•	1		3, 50	5.00	3.00	1.00	270	210	30	
dono	5	6	18		3, 60	4. 68	1		290	200		
donterey		2	5	*******	a. w		3. 24 3. 00		290	326	231	
apa	2	1	7		4.00	4. 50				78	78	
vapavapa	32	121	229		4.00	5. 00	2.00		209	209	209	
	عد ا	121	429	***********	4, 05	3. 19	2. 51		227	230	227	· · · · · · · · · · · · · · · · · · ·
range		(10)		**********								
lacer	25	83	391	2	3.82	2. 67	2.19	2. 13	150	136	. 138	10
lumas	20	28	135		3, 20	3. 03	2.60		231	266	200	
acramento	8	••••••	188		2.75	• • • • • • • • • • • • • • • • • • • •	1.83		265		221	· · · · · · · · · · · · · · · · · · ·
an Bernardino	13	13	156		4.10	3. 62	2. 99		207	183	295	· · · · · · · · · · · · · · · · ·
an Diego	6	7	37		4.60	3. 91	2.73		273	133	197	
an Luis Obispe		•••••	1	******			1.16				60	
anta Barbara			. 10				2.00			•	100	
hasta	11	35	84		4, 13	3, 33	2. 17		245	276	199	
ierra	34	62	1, 540	2	3, 82	3. 75	1. 93	0.75	181	187	87	100
iskiyou	135	18	1, 234	1	3.09	2, 55	1. 87	1.00	161	141	153	36
tenislans	4		39		3.00		1.49		310		<b>3</b> 05	
rinity	117	34	590	3	2.74	3.72	1. 67	0.83	138	130	168	110
ulare	1	2	2		4.00	2, 00	2.00		300	100	300	
bolumne	21	32	66	1	3.40	3.48	2.48	2.00	202	184	175	3(
entura	2	1	8		3. 50	3.00	2.94		259	365	339	
uba	3	11	137	1	4. 83	2.79	1.88	1.00	159	101	140	191
ndistributed pla- cer gold.			714				2.04				146	

### GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES-Continued.

CALIFORNIA-Continued.

					EMP	LOYÉS BI	ELOW GR	OUND.								
COUNTIES.	Aver	age num	ber empl	loyed.	Ave	age wag	es per d	ay.	Averag	e number during		worked	Total number of mines.	Number of pro- ducing	Mines working but non- produc-	Number of mines idle.
	Fore- men or over- seers.	Miners.	Labor- ers.	Boys under 16 years.	Foremen or overseers,	Miners.	Labor- ers.	Boys under 16 years.	Fore- men or over- seers.	Miners.	Labor- ers.	Boys under 16 years.	of inflies.	mines.	tive.	rate.
Total	303	5, 522	944	8	\$3.49	\$2.74	\$2.28	\$1.50	217	209	237	103	2, 109	1, 359	244	506
Alpine		12				3.08				45			13		7	6
Amador	11	382	61	1	4.00	2.99	2.40	1.00	303	304	295	265	40	18	3	19
Butte	11	238	19		3.37	2.58	2.28		230	144	129		174	147	7	20
Calaveras	12	309	24	İ. <b></b>	3, 51	2.40	2.38		285	276	146		64	29	2	33
Colusa	1	2	<b></b> .	<b></b>	4.00	2, 50			300	300		 	1	1		· • • • • • • • • • • • • • • • • • • •
Del Norte													3	3		
Eldorado	27	495	30		3,33	2. 51	2.40		149	169	242		113	66	11	36
Fresno	3	160	26	1	4. 26	2.88	2.09	1,00	267	183	159	18	41	21	6	14
Humboldt													33	30	1	2
Invo	g	92	11		4. 20	3, 33	2.42		213	158	145		43	35	1	7
Kern	1	58	12		4.00	2. 71	2.41		300	149	182		44	32	3	9
Lassen	3	13	11		3.50	2.45	2.40		300	144	255		16	7	6	3
Los Angeles	1	18	10		4.00	3.00	2.05		311	261	302		27	2		25
Mariposa	3	85	11		3.33	2.76	2. 11		255	124	147		83	21	22	40
Merced													2	1		1
Mono	5	72	10		4.82	3. 77	3.70		308	167	301		27	g	6	12
Monterey	1	12			4.00	3,00	,		300	234			1	1	-	
Napa	1	15	8		3,00	2.50	1.75		209	209	209		5	1		4
Nevada	28	452	253		2.93	2.73	2. 29		255	252	240		106	58	7	41
Orange	1	5	200		3.00	2. 50	2.50		60	52	30		18	1	3	14
Placer	63	710	102	4	3, 36	2.71	2.05	1.88	176	195	267	80	157	74	44	39
Plumas	12	252	49		3.50	2.58	2.09	2.00	244	237	284		76	39	9	28
Sacramento	12	2.02	40		3.00	2.00	2.00		244	201	203		54	50		4
San Bernardino	2	115	86		6,00	3.05	3,00		333	271	328		40	14	9	17
San Diego	7	86	12		4.41	2.94	2.70		141	219	193		15	4	2	9
San Luis Obispo			1-2		****	2.01	2		1	#10	100		1		1	- 
Santa Barbara													4	2		2
Shasta	8	158	26		3, 65	2.89	2.20		294	157	238		47	30	6	11
Sierra	42	940	28		3.68	2.77	2.60		232	215	197		196	136	37	23
		251	81		2.79	2.38	1. 67		183	142	201		324	264	30	30
Siskiyou	10	201	61		2.75	٠. ٥٥	1.01		100	172			8	2		6
	16	192	31	1	3, 20	3.19	1.90	1.50	158	184	126	33	214	193	15	6
Trinity		192	01	1 1	3.20	2.50	1-30	1.05	100	188	1.0	1	4	3		.1
Tulare	13	302	27		3, 83	2.79	2.32		236	217	190		62	38	3	21
Taolumne	ì	802	2		4,00	3.44	2. 50		365	319	365		13	2		11
Ventura	1	80	12	1	2,85	2, 20	2.00	1.00	236	211	191	191	40	25	3	12
Yuba	5	80	12	1	2.83	2. 20	2.00	7.00	200	211	101	101	7.0	20		3,2
Undistributed pla- cer gold.																

### GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued.

CALIFORNIA-Continued.

				EXP	ENDIT	CRES.						VALUE OF	MINING P	POPERTY.	
COUNTIES.	Grand		The second distinct to the second second second second second second second second second second second second	A STATE OF THE STA		Office fo	orce.	The same of the sa				1	Value		Under-
0001121201	total of expendi-	Grand total of	Total wages paid		M	fales.	Fen	nales.	Value of supplies.	Other expend-	Total value of	Value of buildings.	of rail- roads on	Machin- ery.	ground improve-
	tures.	wages.	in 1889.	tractors.	Num- ber.	Wages paid.	Num- ber.	Wages paid.		itures.	plant.	9	surface.		ments.
Total	\$12,506,555	<b>\$9,689,265</b>	\$9,191,500	\$296,373	160	\$199,955	4	\$1,437	\$2,151,229	\$666,061	\$67,641,986	\$1,662,014	\$238,467	\$1,230,986	\$12,305,794
Alpine	2,508	1,882	1,882						626		641,000	14, 100		30, 200	306, 000
Amador	783, 381	494, 172	470, 242	7,500	15	16, 430		:	242, 023	47, 186	7, 126, 166	252, 060	12, 265	407, 757	646, 392
Butte	455, 227	410, 547	394, 752	135	14	15, 660		1	41,526	3, 154	6,023,498	84, 105	21, 330	190, 458	3, 227, 539
Calaveras	505, 065	335, 906	326, 536	2,915	6	6, 455		!	156, 724	12,435	1, 478, 310	112, 325	3, 705	89, 843	98, 400
Colusa	3, 600	3, 450	3,450	2,010		0, 100			100	50	100,000	6, 000		20,000	6,000
Del Norte	595	375	375		1				200	20	1,000	100		250	
Eldorado	1	331, 500	283, 065	29, 055	15	19, 389			75, 447	28,002	3, 851, 511	125, 190	2, 625	258, 090	470, 760
Fresno	210, 716	171, 972	149, 518	13, 792	7	8,662		)	34, 353	4,391	1, 946, 258	13, 550	3,050	42, 180	180,903
Humboldt	1 -	39,820	39, 820	10,102	·	0,004			17, 084	10, 875	427, 559	19, 813	1,530	20, 732	6,120
Inyo	1	107, 949	97, 149	5,750	5	5,050			17, 479	16, 182	959, 665	14, 570	2,000	19, 839	112,300
Kern	52,442	41, 632	40, 111	321	1	1, 200			8, 322	2,488	441, 099	8, 360	2, 349	23, 152	89, 040
Lassen	20, 548	17, 084	17, 084			1,200			1,860	1,604	47, 110	2, 500	155	625	10,430
Los Angeles	45, 818	37, 220	34, 820		1	2, 400			7, 998	600	120,000	1,400	1, 200	1,300	18,000
Mariposa	60, 339	41, 843	39, 438	5	1	2,400			10, 022	8,474	1, 901, 120	11,800	3, 250	30,835	108, 343
Merced	90	90	90		-	2, 200			10,022	0,212	1,000	11,000			
Mono	217, 011	131, 821	124, 619	7, 202					62, 992	22, 198	958, 921	38,050	2,700	67, 860	239, 336
Monterey	i '	6, 770	6,770	1, -0-					3,000	800	12, 300	1,000		5, 000	2,000
Napa	1	17, 000	17,000						20,000	1,000	84, 000				1,000
Nevada	1	1,194,617	1, 680, 627	89, 183	14	33, 772	1	35	321, 763	124, 514	8, 086, 144	159, 708	15, 075	518, 932	1, 758, 897
Orange	1 ' '	980	980	0, 100		00,			420		20,000	200		200	500
Placer	1	669, 100	621, 598	36, 497	9	11,005			196, 902	56, 815	4, 859, 287	112,473	5, 511	169, 285	1,446,324
Plumas	1	291, 163	276, 853	3, 210	9	11, 100		1	105, 785	14, 540	1, 749, 691	88,950	5, 675	50, 895	282,664
Sacramento	1	83, 188	83, 188	0,220					15, 859	20, 762	758, 613	18,063		6, 812	1, 628
San Bernardino.	510, 316	334, 083	319, 903	9, 100	7	5, 080			120, 110	56, 123	3, 116, 624	10, 270	56, 659	49, 35)	385, 325
San Diego	185, 962	144,418	115, 618	24,000	2	4, 800		)	29, 004	12, 540	2, 754, 210	15, 090	840	64, 020	91,728
San Luis Obispo	70	70	70	24,000		1,000		1						 	
Santa Barbara	2,317	2,000	2,000					1	317		12,000			. 50	
Shasta	1	199, 611	184, 888	2,010	9	12, 713			105, 543	20, 445	1, 664, 918	21,488	10, 500	24, 240	187,913
Sierra	1	1,116,106	1,063,702	26, 886	26	25, 518	1		275, 964	118, 078	9, 410, 260	251, 850	69, 350	1,567,918	2, 004, 270
Siskiyou	553, 761	527, 822	516, 668	5,044	7	6, 110			111, 245	14, 694	4, 008, 238	134, 218	7, 215	290, 634	128, 031
Stanislaus	26, 200	19, 912	18, 112		1	1,800			3,040	3, 248	20,000	500		5,000	
Trinity	449, 419	332, 257	307, 784	20,348	5	3,325	2	800	85, 319	31, 843	3, 047, 733	100, 345	4, 345	223, 640	145, 45
Tulare	7, 892	7, 192	7, 192				1	]	100	600	95,000	850	50	3, 100	28, 206
Tuolumne	398, 756	318, 468	289, 351	21, 420	6	7, 095	1	602	64, 401	15, 887	1, 331, 687	44,086	6,720	129, 248	258, 061
Ventura		13, 290	13, 290				l		1, 200	11,320	115,000	400		2,500	32,000
Yuba	111, 284	91, 581	90, 581	1,000					14, 510	5, 193	472, 073	7,600	386	17,000	32, 187
Undistributed placer gold.	2, 152, 374	2,152,374	2, 152, 374						,						

# GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued.

 ${\bf CALIFORNIA-Continued.}$ 

	VALUE	or Mining Pi continued		VALUE OF	MILL OR	REDUCTION	WORKS.				MOTI	VE POWER.			
COUNTIES.	Mine	Mine			h			Bo	ilers.	En	gines.		М	otors.	Numb of
•	supplies.	proper.	Cash.	Total.	Build- ings.	Machin- ery.	Sup- plies.		Horse power.		Horse power.	Other power.	Num- ber.	Horse power.	animal
Total	\$585,431	\$48,248,811	\$270, 483	\$3,792,982	\$976.241	\$2, 683, 856	\$132, 885	298	9, 813	266	8, 633		370	12, 063	1, 00
Alpine	200	290, 500		125, 000	12, 500	112, 500		17	665	9	275 }	Water, 19 Air compressor, 1		614	
Amador	79, 967	5, 683, 809	43, 916	246, 675	62, 700	164, 575	19, 400	12	567	. 8	612	zan compressor,1	 		l :
Butte	9, 153	2, 483, 528	7, 385	112, 346	46, 777	63, 612	1,957	27	670	32	761 {	Whim, 1 Water, 24		80	
Calaveras	7, 145	1, 153, 187	13, 705	107, 813	26, 870	77, 163	3, 785	18	545	15	419	Water, 14		173	1
Colusa Del Norte	1,000	67, 000 650		27, 000	6, 900	20,000	1,000	2	80	3.	80				
Eldorado	32, 121	2, 919, 315	43, 410	260, 400	61, 350	198, 150	900	27	945	33	687 {	Water, 33 Windlasses, 9	39	1, 065	3
Fresno	7, 975	1, 697, 200	1,400	86, 580	15, 260	56, 220	15, 100	9	309	5	152 {	Water, 2 Windlass, 1	} 3	60	3
Humboldt	7, 115	372, 2 <b>49</b>		1, 530	1, 530			- <b></b> -				Hydraulie, 26 Windlasses, 13	: - :		3
Inyo	5, 665	805, 250		122, 630	28, 145	91, 650	2,835	14	325	10	420	Whim, 1 Water, 5	1	8.	13
Kern	3, 001	315, 197		23, 045	2, 680	19, 200	1, 165	11	181	7	219	Water, 8	18	367	3
Lassen	550	32, 800		7,000	3, 215	3,425	360	3	21	1	65 {	Whims, 5 Water, 2	} 1	<b>1</b> 0	
Los Angeles	1, 100	90, 000	7, 000	15, 500	4, 300	10,700	500	i	20	1	21	Whim, 1			1
Mariposa	4, 070	1, 742, 820		67, 370	29, 870	<b>34,</b> 300	3, 200	8	370	4	147 }	Whim, 1	} 13	285	
Merced		1,090									ا	Water, 4		••••••	
Mono	7, 175	599, 550	4, 250	112, 450	27, 750	78,900	5, 890	8	345	6	410 {	Aircompressor,1.	} 2	78	2
Monterey Napa	300	4, 000 83, 000		16, 000	5,000	10,000	1,000	1 2	45 49	2	21 49			· · · · · · · · · ·	•••••
Nevada	49, 704	5, 548, 087	44, 741	379, 114	83, 304	284, 544	11, 266	18	995	23	911 {	Water, 22 Steam, 1	50	1, 971	1:
Orange	100	19, 000		150		159					l i	Pelton wheel, 1	,	:	
Placer	25, 814	3, 054, 988	44, 892	247, 223	60,487	171, 232	15, 504	27	1,014	25	1,066	Water, 26	35	559	50
Plumas Sacramento	16, 807 16, 925	1, 304, 700   715, 188		218, 420 11, 363	47, 350 875	157, 170 8, 750	13, 900 1, 738	5	290	6	358	Water, 21 Water, 5	14	697	10
San Bernardino	34, 975	2, 579, 200	854	372, 050	111, 950	250, 400	9,700	14	422	6	227 {	Windlasses. 2	} 5	4,000	49 153
San Diego	67, 800	2, 514, 732		20, 580	3, 180	16, 200	1, 200	4	162	4	162	Whim, 1 Windlasses, 2	3		66
San Luis Obispo Santa Barbara		11,950		300		150	150							••••••	• • • • • • • • • • • • • • • • • • • •
Shasta	21, 202	1, 396, 200	3, 375	189, 895	68, 383	116, 700	4, 812	6	143	3	81	Water, 15	11	206	7.
Sierra	82, 872	5, 400, 810	33, 190	634, 898	180, 500	447, 890	6, 508	34	658	20	414	Water, 32 Hydraulic, 16	48	794	42
Sikkiyon	38, 162	3, 407, 703	2, 275	80, 795	21, 645	54, 925	4, 225	7	121	8	324	Water, 51	18	369	77
Stanislaus	250	14, 250		5, 750	500	5, 000	250					Overshot wheels,2	, 		3
Crinity	54, 250	2, 499, 701	19, 998	110,910	24, 900	85, 100	910	9	217	21	212 {	Water, 41	3 23	15	31
Culare	200	62, 600		5, 300	300	5, 000 .		2	56	2	28			40	•••••
Cuolumne	8, 533	884, 947	92	166, 460	35, 770	126, 770	3, 920	11	574	8	461	Ti-	- 11	441	35
Ventura	1,300	78, 800		8. 100	1, 900	5, 200	1,000	2	33	2	60	Windlasses, 2 Water, 1	2	13	15
Zuba		414, 900		10, 339	1, 250	8, 280	800 .	•••••				Water, 9	8	218	· • • • • • • • • • • • • • • • • • • •

# GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued.

### COLORADO.

COUNTIES.	Total amount of ore pro-	Total amount of ore sold.	Total amount of ore treated.	ASSAY VALUE	OF ORE SOLD.	тот	TAL BULLION VAL	ĽE.	VALUE OF B	ED COINING BULLION PRO- M ORE SOLD.
	duced. (Short tons.)	(Short tons.)	(Short tons.)	Gold.	Silver.	Grand total bullion.	Gold.	Silver.	Gold.	Silver,
Total	852, 211	640, 917	148, 856	\$2, 501, 008	\$24, 968, 319	\$27, 641, 610	\$3, 883, 859	\$23, 757, 751	\$2, 375, 958	\$23, 719, 903
Boulder	24, 267	3, 486	12, 468	225, 854	101, 213	417, 782	310, 725	107, 057	214, 560	96, 150
Chaffee	28, 945	27, 049	720	227, 051	303, 705	550, 429	260, 627	289, 802	215, 699	288, 520
Clear Creek	34, 224	31, 250	3, 381	312, 296	2, 465, 499	2, 715, 003	372, 400	2, 342, 603	296, 681	2, 342, 224
Conejos	12	12		3, 262	3, 278	6, 213	3, 099	3, 114	3, 099	3, 114
Custer	1,514	452	50	20	61, 198	58, 904	19	58, 885	19	58, 139
Dolores	2,702	2, 463		40, 540	502, 834	516, 205	38, 512	477, 693	38, 512	477, 693
Eagle	8,426 4	8, 416		128,056	368, 723	471, 941	121, 654	350, 287	121,654	350, 287
Fremont			[						[] []	
Gilpin	119, 553	29, 594	92, 824	614, 779	450, 279	1, 721, 747	1, 289, 420	432, 327	584, 040	427,766
Gunnison	7, 494	4, 248	300	15, 681	188, 818	205, 882	16, 162	189, 720	14, 897	179, 377
Hinsdale	5, 411	389		1, 572	21, 553	21, 969	1, 494	20, 475	1,494	20, 475
Lake	365, 169	343, 336	6, 180	174, 367	8, 679, 211	8, 467, 151	221, 167	8, 245, 984	165, 649	8, 245, 250
La Plata	759	78	25	3, 570	2, 968	7, 611	4, 791	2, 820	3, 391	2, 820
Larimer	385									
Ouray	14, 363	14; 151	335	245, 188	1, 752, 444	1, 901, 131	236, 309	1, 664, 822	232, 929	1, 664, 822
Park	33, 766	23, 931	8,075	34, 709	332, 288	449, 560	127, 886	321, 674	32, 974	315, 674
Pitkin	128, 150	118, 373	1,500		7, 726, 509	7, 362, 422	22, 238	7, 340, 184		7, 340, 184
Rio Grande	172	96		10, 664	800	10, 891	10, 131	760	10, 131	760
Routt		ļ	[			18,400	18, 400			
Saguache	626	490	120	3, 429	24, 312	28, 554	5, 458	23, 096	3, 258	23, 096
San Juan	15, 869	7, 094	3,710	94, 035	490, 779	610, 362	142, 687	467, 675	89, 333	466, 240
San Miguel	15, 294	8,847	6, 485	258, 417	842, 018	1, 107, 006	306, 328	800, 678	245, 496	799, 917
Summit	45, 110	17, 162	12, 683	107, 518	649, 890	892, 447	274, 352	618, 095	102, 142	617, 395
Undistributed gold						100,000	100, 000			

	COINING VALUE ONE TR	UCED FROM	PLACER	BULLION.	Total produc-			NUMBER	OF MINES PRO	ODUCING—		
counties.	Gold.	Silver.	Gold.	Silver.	ing mines reported.	Less than \$1,000.	\$1,000 to \$10,000.	\$10,000 to \$50,000.	\$50,000 to \$100,000.	\$100,000 to \$250,000.	\$250,000 to \$500,000.	Over \$500,000.
Total	\$1, 294, 710	\$37, 574	\$113, 191	\$274	988	426	331	134	27	44	19	
Boulder	94, 965	10, 907	1, 200		90	54	22	12	2			
Chaffee	7, 056	1, 008	37, 872	274	31	17	10	2		1	1	
Clear Creek Conejos	1	379	500		131 2	32	64 2	19	4	10	2	
Custer					18	0	7	2				
Dolores				1.	5			3		1		
Eagle						4	7	5	2	1		
Gilpin	1	4, 561	7, 150		81	18	39	13	5	6		
Gunnisou	200	10, 343	1,065		102 43	81 36	13 7	8				
Hinsdale Lake	Ì	734		1	45 67	4	15	21	7	11	5	
La Plata	1 '	1			34	33	1			 		
Larimer	, ,				4	4						
Ouray	3, 380		]		46	12	21	6	1	4	2	
Park	60, 880	6, 000	34, 632	ļ	42	17	15	8	1	1		
Pitkin	22, 238			]	101	48	25	14	3	3	5	
Rio Grande	ļ			. <b></b> .	2		2					
Routt	]		18,400	]	2	1		1				
Sagnache	2, 200				20	8	12					
San Juan	53, 354	1, 435			49	12	24	10	2	1		
San Miguel	58, 782	761	2,050		27	4	15	4		1	3	
Summit	161, 288	700	10, 922		72	32	30	6	: 	4		
Undistributed gold											i 	

# GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued.

 ${\bf COLORADO-Continued.}$ 

,	i						E	MPLOYÉS AE	OVE GR	OUND.							
COUNTIES.		Avera	ige num	ber employ	ed.			Average w	iges per	r day.	-7.000	Avera	ige nu	mber	of days	worked du	ring year
•	Foremen overseer		hanics.	Laborers	Boys under 1 years.	16	oremen or verseers.	Mechanics	. Labo	orers.	Boys under 16 years.	Forem overs		Mech	anies.	Laborers.	Boys under 16 years.
Total	330	0	781	1, 505	1	6	\$4, 33	\$3, 80	\$	2. 91	\$1,70		234		254	237	21
Boulder	2	2	53	58			3. 43	2.77		2. 62		]	212		119	203	
haffee	1	- 1	15	101		1	3.48	3.37		2.76	1, 25		133		243	219	
lear Creek	3	4	56	92		1	3, 75	3.18		2.78	2,00		256		299	265	3:
Conejos	1 :	3	4	3			4.50	3.87		3, 00		.]]	246		349	332	
uster		1   .	12	12			10.00	3.50		2.68		-li	100		107	74	
Dolores	1	2	5	10	]		4.50	3.90		3. 10		-	195		237	312	
Cagle	1	9	21	16			4.00	3.70	]	3. 19		-	240		183	188	. <b></b>
remont			2	4				3.00		2.50		-			52	52	<b>.</b>
Hilpin	2	2	70	119		4	3.94	3.15	1	2.63	1.37	li	278		309	287	1
dunnison	1	7	24	24			3.90	3.33	1	2.86		ĮĮ.	164		142	213	
Tinsdale		1	1	7			4,00	3.50		3.50		-	50		200	63	
ake	5	1	210	203	-	3	4, 53	3.91		2.95	1.50		300		297	297	3
a Plata		1		2			2.50	1 	-[	3.50		-	60			118	
Larimer	1	3		10		1	3, 50	i   • <i>• • • • • • • •</i>	-]	2.90	1.75	11	23			13	1
Ouray		6	59	160			4.92	3.91		3.02		-	248		241	257	
Park	1	8	20	124		1	4, 33	3.90	1	2.76	1.25	il	161		209	130	
Pitkin	8	6	155	125		5	4.76	4.56	1	3.21	2. 20		248		281	282	2
Rio Grande										<i></i> .							
Routt	1	2		18			3.00			3.00	 	-	175	- <b></b>		136	
Saguache		2	2	8			3.00	3. 50	l	2.62			65		72	76	<i></i>
San Juan	1	1	26	35		]]	5, 73	4.00	1	3.19		-]]	206		161	228	
San Miguel	1	5	13	120			5.40	4.23	1	3.56			106		202	252	
Summit	2	3	33	75			4.38	3.76		2, 95		-11	242		229	226	
Undistributed gold				179						2.57	 					218	
	Avera	ge num	ber emp	loyed.	Avera	ıge wa	iges per da	ıy.	verage	numbe	er of days	worked	Tot		Numbe		Numbe
COUNTIES.	Fore- men or	ge num Miners.	Labor-	Boys under	Fore- men or	ige wa	Labor-	Boys I under m	ore-	numbe during diners.	Labor-	Boys under	Tota numl of mine	ber	Numbe of pro- ducing mines.	working but not	Numbe of mine idle.
COUNTIES.	Fore-		T -1	Boys	Fore-		Tabox	Boys I under m	ore.	during	year.	Boys	numl of	ber	of pro-	working but not	of mine
Total	Foremen or over-seers.		Labor-	Boys under 16	Fore- men or over- seers.		Labor-	Boys under m	ore. en or ver-	during	Labor-	Boys under 16	numl of	ber	of pro-	working but not	of mine
Total	Foremen or over-seers.	Miners.	Laborers.	Boys under 16 years.	Foremen or over-seers.	Miners \$3.08	\$2. 88 2. 23	Boys under m c years.	ore- en or ver- ecrs.	during diners.  241 156	Laborers.	Boys under 16 years.	numl of mine	71 222	of producing mines.  988	working but not producing.	of mine idle.
Total	Foremen or over-seers.	Miners. 9,585	Laborers.	Boys under 16 years.	Fore-men or over-seers.	\$3.08 2.64 2.99	\$2. 88 2. 23 2. 60	Boys under 16 years. \$1.69	226 164 239	during diners.  241  156 212	Laborers.  244  188 256	Boys under 16 years.	numl of mine 1, 8	71 222 76	988 90	working but not producing.	of mine idle.
Total	Foremen or overseers.	Miners. 9,585	Laborers.  569  20 57 74	Boys under 16 years.	Foremen or over-seers.	\$3.08 2.64 2.99 2.79	\$2. 88 2. 23 2. 60 2. 62	Boys under 16 years. \$1.69	ore- en or ver- ecrs.	during diners.  241 156	Laborers.  244  188 256 252	Boys under 16 years.	numl of mine 1,8	71 22 76 09	988 90 31	working but not producing.	of mine idle.
Total	Foremen or overseers.	9,585 449 227	Laborers.  569  20 57 74 2	Boys under 16 years.	Fore-men or over-seers. \$4.22 \$3.83 \$4.13 \$3.65	\$3.08 2.64 2.99 2.79 2.93	\$2. 88 2. 23 2. 60 2. 62 2. 75	Boys under 16 years. \$1.69	226 239 274	during  diners.  241  156 212 250 167	Laborers.  244  188 256 252 74	Boys under 16 years.	numl of mine 1, 8	71 22 76 09 13	988 90 31 131 2	working but not producing.	of mine idle.
Total	Foremen or over-seers.	9,585 449 227 1,227 30	Laborers.  569  20 57 74 2 2	Boys under 16 years.	Fore-men or over-seers. \$4.22 \$3.83 4.13 3.65	\$3. 08 2. 64 2. 99 2. 79 2. 93 2. 89	\$2. 88 2. 23 2. 60 2. 62 2. 75 2. 00	Boys under 16 years. \$1.69	226 164 239 274	during  4iners.  241  156 212 250 167 117	Laborers.  244  188 256 252 74 81	Boys under 16 years.	numl of mine 1, 8	71 22 76 09	988 90 31 131 2	working but not producing.	of mine idle.
Total	Fore-men or over-seers.  396  22 12 32  8 8	9,585 449 227 1,227 30 110	Laborers.  569  20 57 74 2	Boys under 16 years.	Fore-men or over-seers. \$4.22 3.83 4.13 3.65	\$3. 08 2. 64 2. 99 2. 79 2. 93 2. 89 3. 50	\$2. 88 2. 23 2. 60 2. 62 2. 75	Boys under 16 years. \$1.69	226 239 274	diners.  241  156 212 250 167 117 253	Laborers.  244  188 256 252 74	Boys under 16 years.	numl of mine 1, 8	71 22 76 09 113 44 14	988 90 31 131 2 18	working but not producing.	of mine idle.
	Fore-men or over-seers.    396   22   12   32     8   8   8   13	9,585 449 227 1,227 30	Laborers.  569  20 57 74 2 2	Boys under 16 years.	Fore-men or over-seers. \$4, 22 \$3.83 \$4.13 \$3.65 \$5.50 \$4.63 \$3.92	\$3. 08 2. 64 2. 99 2. 79 2. 93 2. 89 3. 50 3. 07	\$2. 88 2. 23 2. 60 2. 62 2. 75 2. 00	Boys under 16 years. \$1.69	226 226 274 231 277	241 156 212 250 167 117 253 247	Laborers.  244  188 256 252 74 81	Boys under 16 years.	numl of mine 1, 8	71 22 76 09 13 44 14 29	988 90 31 131 2	working but not producing.  418  60  26  30  9  8  2  5	of mine idle.
Total	Fore-men or over-seers.  396  22 12 32  8 8 8 13	9,585 449 227 1,227 30 110 114 193 14	Laborers.  569 20 57 74 2 10	Boys under 16 years.	Fore-men or over-seers.  \$4.22  3.83 4.13 3.65  3.94 4.63 3.92 4.00	\$3. 08 2. 64 2. 99 2. 79 2. 93 2. 89 3. 50 3. 07 3. 00	\$2.88 2.23 2.60 2.62 2.75 2.00 3.20	Boys under 16 years. \$1.69	226 226 274 277 52	241 156 212 250 167 117 253 247 57	Labor-ers.  244  188 256 252 74 81 311	Boys under 16 years.	numl of mine	71 22 76 09 13 44 14 29 2 .	988 90 31 131 2 18 5	working but not producing.  418  60 26 30 9 8 2 5 2	of mine idle.
Total  Boulder Chaffee Clear Creek Conejos Custer Dolores Eagle Fremont Gilpin	Fore-men or over-seers.  396  22 12 32  8 8 13 2 26	9,585 449 227 1,227 30 110 114 193 14 734	Laborers.  569 20 57 74 2 10	Boys under 16 years.	Fore-men or over-seers.  \$4. 22	\$3. 08 2. 64 2. 99 2. 79 2. 93 2. 89 3. 50 3. 07 3. 00 2. 66	\$2.88 2.23 2.60 2.62 2.75 2.00 3.20	Boys under 16 years. \$1.69	226 Leave Market	241 156 212 250 167 117 253 247 57 265	Laborers.  244  188 256 252 74 81 311	Boys under 16 years.	numl of mine	71 222 76 09 13 44 14 229 2	of producing mines.  988  90 31 131 2 18 5 19	working but not producing.  418  60  26  30  9  8  2  5  2  8	of mine idle.
Total  Boulder Chaffee Clear Creek Conejos Custer Dolores Eagle Fremont Gilpin	Fore-men or over-seers.  396  22 12 32  8 8 13 2 26	9,585 449 227 1,227 30 110 114 193 14	Laborers.  569  20 57 74 2 10  39 12	Boys under 16 years.	Fore-men or over-seers.  \$4.22 :  3.83   4.13   3.65   3.94   4.63   3.92   4.00   3.68   4.26	\$3. 08 2. 64 2. 99 2. 79 2. 93 2. 89 3. 50 3. 07 3. 00 2. 66 3. 18	\$2.88 2.23 2.60 2.62 2.75 2.00 3.20	Boys under 16 years. \$1.69	226 164 239 274	diners.  241  156 212 250 167 117 253 247 57 265 163	Laborers.  244  188 256 252 74 81 311 288 147	Boys under 16 years.	1, 8	71 22 76 09 13 44 14 29 2 1 31 34	988 90 31 131 2 188 5 19 81 102	working but not producing.  418  60  26  30  9  8  2  5   2  8  78	of mine idle.
Total  Chaffee  Clear Creek  Conejos  Duster  Dolores  Sagle  Fremont  Gilpin  Funnison	Fore-men or over-seers.    396     22   12   32	9,585 449 227 1,227 30 110 114 193 14 734	Laborers.  569  20 57 74 2 10  39 12 2	Boys under 16 years.	Fore-men or over-seers.  \$4.22 :  3.83	#3. 08 2. 64 2. 99 2. 79 2. 93 3. 50 3. 07 3. 00 2. 66 3. 18 2. 47	\$2. 88  2. 23 2. 60 2. 62 2. 75 2. 00 3. 20  2. 49 3. 25 3. 75	Boys under 16 years. \$1.69	226 226 274 277 252 258 190 93	241  156 212 250 167 117 253 247 57 265 163 97	Laborers.  244  188 256 252 74 81 311  288 147 210	Boys under 16 years.  257  42	1, 8	ber	988 90 31 131 2 18 5 19	working but not producing.  418  60  26  30  9  8  2  5   2  8  78  23	of mine idle.
Total	Fore-men or over-seers.  396  22 12 32  8 8 13 2 26 14 25 61	9,585 449 227 1,227 30 110 114 193 14 734 617	Laborers.  569  20 57 74 2 10  39 12	Boys under 16 years.	Fore-men or over-seers. \$4. 22 3 3. 83 4. 13 3. 65 3. 94 4. 63 3. 92 4. 00 3. 68 4. 26 4. 24 4. 24	\$3. 08 2. 64 2. 99 2. 79 2. 89 3. 50 3. 00 2. 66 3. 18 2. 47 3. 01	\$2.88 2.23 2.60 2.62 2.75 2.00 3.20	Boys under 16 years. \$1.69	226 226 24 239 274 277 252 258 190 93 285	diners.  241  156 212 250 167 117 253 247 57 265 163 97 274	Laborers.  244  188 256 252 74 81 311 288 147	Boys under 16 years. 257 42	1,8 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	ber 222 776 009 113 444 144 144 129 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	988 90 31 131 2 18 5 19 81 102 43 67	working but not producing.  418  60  26  30  9  8  2  5  2  8  78  23  15	of mine idle.
Total  Chaffee  Clear Creek  Conejos  Juster  Dolores  Eagle  Fremont  Jilpin  Junison  Hinsdale  Lake	Fore-men or over-seers.  396  22 12 32  8 8 13 2 61 14 25 61 1	9,585  449 227 1,227 30 110 114 193 14 617 167 1,828 84	Laborers.  569  20 57 74 2 10  39 12 2	Boys under 16 years.	Fore-men or over-seers. \$4, 22 3.83 4.13 3.65 3.94 4.63 3.92 4.00 3.68 4.26 4.24 4.24 5.00	\$3. 08 2. 64 2. 99 2. 79 2. 93 3. 50 3. 00 2. 66 3. 18 2. 47 3. 01 3. 43	\$2. 88  2. 23 2. 60 2. 62 2. 75 2. 00 3. 20  2. 49 3. 25 3. 75	Boys under 16 years. \$1.69	226 164 239 274	241  156 212 250 167 117 57 265 163 97 274 68	Laborers.  244  188 256 252 74 81 311  288 147 210	Boys under 16 years.  257  42	1,88 2 2 2 2 2 2 2 2 2 2 4 4 4 4 4 4 4 4 4	771 = 222 776 009 113 444 144 144 229 2 1 335 33 155	988 990 311 131 2 18 5 19 43 67 34	working but the following working to the following working to the following working to the following working but the following working but the following working but the following working but the following working but the following working but the following working but the following working but the following working but the following working but the following working but the following working but the following working but the following working but the following working working but the following working working but the following working working working working working working but the following working working but the following worki	of mine idle.
Total  Boulder Chaffee Clear Creek Conejos Custer Dolores Eagle Fremont Gilpin Hunnison Hinsdale Lake La Plata Larimer	Fore-men or over-seers.  396  22 12 32  32  8 8 13 2 266 14 25 61 1	9,585 449 227 1,227 30 110 114 193 14 617 167 1,828 84 18	Laborers.  569  20 57 74 2 2 10  39 12 2 77	Boys under 16 years.	Fore-men or over-seers. \$4, 22 3, 83 4, 13 3, 65 3, 94 4, 63 3, 92 4, 00 d, 68 4, 24 4, 24 5, 00 2, 50	\$3. 08 2. 64 2. 99 2. 79 2. 93 3. 50 3. 00 2. 66 3. 18 2. 47 3. 01 3. 43 2. 43	\$2.88 2.23 2.60 2.62 2.75 2.00 3.20 2.49 3.25 3.75 2.93	Boys under 16 years. \$1.69 1.15 1.52	226 164 239 274	241 156 212 250 117 253 247 57 265 163 97 274 68 73	Labor-ers.  244  188 256 252 74 81 311	Boys under 16 years.  257  42	number of number	ber 338	988 90 31 131 2 18 5 19 81 102 43 67 34 4	working but the following working but the following.  418  60  26  30  9  8  2  5  2  8  78  23  15  5  7	of mine idle.
Total  Boulder Chaffee Clear Creek Conejos Custer Dolores Eagle Fremont Glipin Gunnison Hinsdale Lake La Plata Larimer Duray	Fore-men or over-seers.  396  22 12 32 32  8 8 13 2 26 14 25 61 1 1 41	9,585 449 227 1,227 30 110 114 193 14 734 617 1,828 84 18 647	Laborers.  569  20 57 74 2 2 10  39 12 2 77	Boys under 16 years.	Fore-men or over-seers. \$4, 22 \$3, 83 \$4, 13 \$3, 65 \$5 \$4, 20 \$4, 63 \$3, 92 \$4, 00 \$4, 26 \$4, 24 \$4, 24 \$5, 00 \$2, 50 \$4, 64 \$4, 64 \$4,	\$3. 08 2. 64 2. 99 2. 93 3. 50 3. 07 3. 00 2. 66 3. 18 2. 47 3. 43 2. 43 3. 43	\$2.88 2.23 2.60 2.62 2.75 2.00 3.20 2.49 3.25 3.75 2.93	Boys under 16 years. \$1.69 1.15 1.52	226 226 232 2 25 26 232	241 156 212 250 117 253 247 57 265 163 97 274 68 73 246	Labor- ers.  244  188 256 252 74 81 311	Boys under 16 years. 257 42	number of north of north of north of north of north of north north of north no	5 5 5 5 3 3 5 5 5 5 5 7 3	988 90 31 131 131 2 18 5 19 81 102 43 67 34 44	working but not producing.  418  60  26  30  9  8  2  5  7  7	of mine idle.
Total  Boulder Chaffee Clear Creek Conejos Juster Dolores Eagle Fremont Gilpin Gunnison Hinsdale Lake La Plata Larimer Duray Park	Fore-men or over-seers.  396  22 12 32  8 8 8 13 2 26 14 25 61 1 1 41 10	9,585 449 227 1,227 30 110 114 193 14 734 617 1,828 84 18 647 231	Laborers.  569  20 57 74 2 2 10  39 12 2 77	Boys under 16 years.  14 1	Fore-men or over-seers.  \$4, 22  3, 83  4, 13  3, 65  3, 94  4, 63  3, 92  4, 00  4, 68  4, 26  4, 24  5, 00  2, 50  4, 64  3, 85	\$3. 08 2. 64 2. 99 2. 79 2. 93 3. 50 3. 07 3. 00 2. 66 3. 18 2. 47 3. 43 3. 43 3. 47 3. 11	\$2.88  2.23 2.60 2.62 2.75 2.00 3.20  2.49 3.25 3.75 2.93	Boys under 16 years. \$1.69 1.15 1.52	226 224	241 156 212 250 167 117 253 247 57 265 163 97 274 68 73 246 185	Labor-ers.  244  188 256 252 74 81 311	Boys under 16 years. 257 42	number of normal number of number of normal number of numb	per	988 90 31 131 2 18 5 19 81 102 43 67 34 44 46 42	working but not producing.  418  60 26 30 9 8 22 5 2 8 78 78 77 12	of mine idle.
Total  Boulder Chaffee Clear Creek Conejos Unster Dolores Eagle Fremont Gilpin Sunnison Hinsdale Lake Lake Larimer Duray Park	Fore-men or over-seers.  396  22 12 32  8 8 8 13 2 26 14 25 61 1 1 41 10 43	9,585 449 227 1,227 30 110 114 193 14 734 617 1,828 84 18 647 231 1,518	Laborers.  569  20 57 74 2 2 10  39 12 2 77	Boys under 16 years.	Fore-men or over-seers.  \$4. 22  3. 83 4. 13 3. 65  3. 94 4. 63 3. 92 4. 00 3. 68 4. 26 4. 24 4. 24 5. 00 2. 50 4. 64 3. 85 4. 34	\$3. 08 2. 64 2. 99 2. 79 2. 89 3. 50 3. 07 3. 00 2. 66 3. 18 2. 47 3. 01 3. 43 3. 44 3.  \$2.88 2.23 2.60 2.62 2.75 2.00 3.20 2.49 3.25 3.75 2.93	Boys under 16 years. \$1.69 1.15 1.52	226 224 228	241 156 212 250 167 117 253 247 57 265 163 97 274 68 73 246 185 353	Labor- ers.  244  188 256 252 74 81 311	Boys under 16 years. 257 42	numin of n in in in in in in in in in in in in i	58	988 90 31 131 2 18 5 19 81 102 43 67 34 46 42 101	working but not producing.  418  60 26 30 9 8 25 5 2 8 78 23 15 7 7 12 63	of min idle.	
Total  Boulder Chaffee Clear Creek Conejos Custer Dolores Eagle Fremont Gilpin Gunnison Hinsdale Lake La Plata Larimer Duray Park Pitkin Rio Grande	Fore-men or over-seers.  396  22 12 32  8 8 8 13 2 26 14 25 61 1 1 41 10 43 1	9,585 449 227 1,227 30 110 114 193 14 734 617 1,828 84 18 647 231	Laborers.  569  20 57 74 2 2 10  39 12 2 77	Boys under 16 years.  14 1	Fore-men or over-seers.  \$4, 22  3, 83  4, 13  3, 65  3, 94  4, 63  3, 92  4, 00  4, 68  4, 26  4, 24  5, 00  2, 50  4, 64  3, 85	\$3. 08 2. 64 2. 99 2. 79 2. 93 3. 50 3. 07 3. 00 2. 66 3. 18 2. 47 3. 43 3. 43 3. 47 3. 11	\$2.88  2.23 2.60 2.62 2.75 2.00 3.20  2.49 3.25 3.75 2.93	Boys under 16 years. \$1.69 1.15 1.52	226 224	241 156 212 250 167 117 253 247 57 265 163 97 274 68 73 246 185	Labor-ers.  244  188 256 252 74 81 311	Boys under 16 years. 257 42	number	58	988 90 31 131 2 18 5 19 81 102 43 67 34 44 42 101 2	working but not producing.  418  60 26 30 9 8 22 5 2 8 78 78 77 12	of minidle.
Total  Boulder Chaffee Clear Creek. Conejos Custer Dolores Eagle Fremont Gilpin Gunnison Hinsdale Lake La Plata Larimer Duray Park Pitkin Rio Grande Routt	Fore-men or over-seers.  396  22 12 32  8 8 8 13 2 26 14 25 61 1 1 1 10 43 1	9,585 449 227 1,227 30 110 114 193 14 734 617 167 1,828 84 18 647 231 1,518 16	Laborers.  569 20 57 74 2 2 10 39 12 2 77 62 11 98	Boys under 16 years.  14 1	Fore-men or over-seers.  \$4, 22  3, 83  4, 13  3, 65  3, 94  4, 63  3, 92  4, 00  3, 68  4, 24  4, 24  5, 00  2, 50  4, 64  3, 85  4, 34  4, 00	\$3. 08 2. 64 2. 99 2. 79 2. 89 3. 50 3. 07 3. 00 2. 66 3. 18 2. 47 3. 01 3. 43 3. 47 3. 11 3. 36 3. 09	\$2.88  2.23 2.60 2.62 2.75 2.00 3.20  2.49 3.25 3.75 2.93	Boys under 16 years. \$1.69 1.15 1.52 1.52 2.00	226 224 2258 300	241 156 212 250 167 117 265 163 97 274 68 73 246 185 353 141	Laborers.  244  188 256 252 74 81 311	Boys under 16 years. 257 42	number	771 222 76 09 113 144 144 229 2 1 5 5 5 3 3 3 3 3 3 6 6 9 9 2 2	988 90 31 131 2 18 5 19 43 67 34 44 42 101 2	working but no ducing.  418  60  26  30  9  8  23  15  5  7  12  63  2	of mine idle.
Total  Boulder	Fore-men or over-seers.  396  22 12 32  8 8 8 13 2 26 14 25 61 1 1 41 10 43 1	9,585  449 227 1,227 30 110 114 193 14 734 617 167 1,828 84 18 647 231 1,518 16	Laborers.  569  20 57 74 2 10  39 12 2 77  62 11 98	Boys under 16 years.  14 1	Fore-men or over-seers. \$4. 22 3.83 4. 13 3. 65 3. 94 4. 63 3. 92 4. 00 3. 68 4. 26 4. 24 4. 24 5. 00 2. 50 4. 64 3. 85 4. 34 4. 00 3. 15	\$3. 08 2. 64 2. 99 2. 79 2. 93 3. 50 3. 00 6. 3. 18 2. 47 3. 01 3. 43 2. 43 3. 47 3. 11 3. 36 3. 39 2. 99	\$2.88 2.23 2.60 2.62 2.75 2.00 3.20 2.49 3.25 3.75 2.93 2.76 3.00 3.03	Boys under 16 years. \$1.69 1.15 1.52 1.52 2.00	226 224 238 300 105	241 156 212 250 167 117 253 247 265 163 97 274 68 73 246 185 353 141	244  188 256 252 74 81 311 288 147 210 262 230 204 290	Boys under 16 years.  257  42  260  304	number of number	ber	988  900 311 131 2 18 5 19 43 67 34 46 42 101 2 2 2	working but no ducing.  418  60  26  30  9  8  23  15  5  7  12  63  2	of mine idle.
Total  Boulder	Fore-men or over-seers.  396  22 12 32  8 8 13 2 26 61 1 1 41 10 43 1 13 20	9,585  449 227 1,227 30 110 114 193 14 734 617 167 1,828 84 18 647 231 1,518 16	Laborers.  569  20 57 74 2 10  39 12 2 77  62 11 98	Boys under 16 years.  14 1	Fore-men or over-seers. \$4. 22 3. 83 4. 13 3. 65 3. 94 4. 63 3. 92 4. 00 3. 92 4. 00 3. 68 4. 24 4. 24 5. 00 2. 50 4. 64 3. 85 4. 34 4. 00 3. 15 4. 78	\$3. 08 2. 64 2. 79 2. 93 3. 50 3. 07 3. 00 2. 47 3. 01 3. 43 2. 43 3. 47 3. 11 3. 36 3.  \$2.88 2.23 2.60 2.62 2.75 2.00 3.20 2.49 3.25 3.75 2.93 2.76 3.00 3.03	Boys under 16 years. \$1.69 1.15 1.52 1.52 2.00	226 224 258 300 105 163	241 156 212 250 167 117 265 163 97 274 68 73 246 185 353 141	244  188 256 252 74 81 311 288 147 210 262 230 204 290	Boys under 16 years.  257  42  260  304  60 313	number of frame of fr	ber 283	988  900 311 131 2 18 5 19 8 81 102 43 67 34 46 42 101 2 2 20 49	working but not producing.  418  60  26  30  9  8  23  15  5  7  7  12  63  2	of mine idle.	
Total  Boulder Chaffee Clear Creek Conejos Custer Dolores Eagle Fremont Gilpin Gunnison Hinsdale La Plata Larimer Duray Park Pitkin Rio Grande Routt Saguache San Juon	Fore-men or over-seers.  396  22 12 32  32  8 8 13 2 266 14 25 61 1 1 41 10 43 1 13 20 22	9,585 449 227 1,227 30 110 114 193 14 734 617 1,828 84 18 647 231 1,518 16 67 393 392	Laborers.  569  20 57 74 2 2 10  39 12 2 77  62 11 98  6 20 59	Boys under 16 years.  14 1	Fore-men or over-seers. \$4, 22 3, 83 4, 13 3, 65 3, 94 4, 63 3, 92 4, 00 3, 68 4, 24 4, 24 5, 00 2, 50 4, 64 3, 85 4, 34 4, 00 3, 15 4, 78 5, 39	\$3. 08 2. 64 2. 79 2. 93 2. 89 3. 50 3. 07 3. 00 2. 47 3. 11 3. 43 2. 43 3. 47 3. 11 3. 36 3. 09 2. 93 3. 45 3. 67	\$2.88  2.23 2.60 2.62 2.75 2.00 3.20  2.49 3.25 3.75 2.93  2.76 3.00 3.03	Boys under 16 years. \$1.69  1.15  1.52  1.50 2.00	226 164 239 274 114 331 277 52 258 60 50 232 224 258 300 105 163 241	241 156 212 250 167 177 57 265 163 97 246 185 353 141 93 167 171	Labor- ers.  244  188 256 252 74 81 311	Boys under 16 years.  257  42  260  304  60 313	number of frame of fr	771 222 76 776 776 776 776 776 776 776 776	988  900 311 131 2 18 5 19 43 46 42 101 2 2 20 49 27	working but not but no	of mine idle.
Total  Boulder Chaffee Clear Creek Conejos Custer Dolores Eagle Fremont Gilpin Gunnison Hinsdale Lake Lae Plata Larimer Duray Park Pitkin Rio Grande	Fore-men or over-seers.  396  22 12 32  8 8 13 2 26 61 1 1 41 10 43 1 13 20	9,585  449 227 1,227 30 110 114 193 14 734 617 167 1,828 84 18 647 231 1,518 16	Laborers.  569  20 57 74 2 10  39 12 2 77  62 11 98	Boys under 16 years.  14 1 1	Fore-men or over-seers. \$4, 22 3, 83 4, 13 3, 65 3, 94 4, 63 3, 92 4, 00 3, 68 4, 24 4, 24 5, 00 2, 50 4, 64 3, 85 4, 34 4, 00 3, 15 4, 78 5, 39	\$3. 08 2. 64 2. 79 2. 93 3. 50 3. 07 3. 00 2. 47 3. 01 3. 43 2. 43 3. 47 3. 11 3. 36 3.  \$2.88 2.23 2.60 2.62 2.75 2.00 3.20 2.49 3.25 3.75 2.93 2.76 3.00 3.03	Boys under 16 years. \$1.69  1.15  1.52  1.50 2.00	226 224 258 300 105 163	241 156 212 250 167 117 265 163 97 274 68 73 246 185 353 141	244  188 256 252 74 81 311 288 147 210 262 230 204 290	Boys under 16 years.  257  42  260  304  60 313	number of frame of fr	771 222 76 776 776 776 776 776 776 776 776	988  900 311 131 2 18 5 19 8 81 102 43 67 34 46 42 101 2 2 20 49	working but not producing.  418  60  26  30  9  8  23  15  5  7  7  12  63  2	of mine idle.	

# GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued.

				EXI	PENDIT	URES.					l	VALUE OF	F MINING P	ROPERTY.	
COUNTIES.		7 200 17 10				Office	force.								
COUNTES.	Grand total of expendi-	Grand total of wages.	Total wages paid in	Paid to con- tract-	ı	fales.	Fer	nales.	Value of supplies.	Other expendi-	Total value of	Value of build-	Value of railroads	Ma-	Under- ground
	tures.		1889.	ors.	Num ber.	Wages paid.	Num- ber,	Wages paid.	1	tures.	plant.	ings.	on sur- face.	chinery.	improvo ments.
Total	\$13,834,332	\$10,114,682	<b>\$9,339</b> ,875	\$400,772	219	<b>\$368, 639</b>	7	<b>\$5,396</b>	<b>\$2,559,7</b> 05	\$1,159,945	\$137,881,531	\$1,285,853	\$137,5 <b>6</b> 2	\$2,961,167	\$26 318 64
Boulder	,	269, 697	252, 714	8, 650	8	8, 333			78, 380	05 018	0.004.046				420,010,01
Chaffee		298, 972	279,001	2, 221	y	17,750			55, 196	65, 617	8, 821, 846	65, 840	4, 135	130, 099	2, 037, 59
Clear Creck		1, 131, 361	1, 071, 344	34, 729	11	25, 288			169, 133	8,329	3, 841, 855	56, 035	15, 285	147, 445	491, 201
Conejos		28, 979	27, 300	770		,			3, 980	85, 060 1, 800	16, 023, 934	108, 845	25, 095	299, 077	3, 597, 60
Custer		50,332	47, 682		5	2, 650			19, 938	250	88, 700	1; 110	100	1, 100	13, 01
Dolores		144, 592	139, 992		3	4,600			33, 450	8, 938	1, 451, 990	16, 400	3,070	51,400	254, 010
Eagle		196, 448	190, 728	2, 320	3	3, 400			37, 852	7, 193	3, 327, 150	10, 735	759	18,450	276, 846
Fremont		3, 625	3, 625						4, 675	' '	2, 826, 950	22, 225	14, 735	54,300	572, 250
Jilpin		749, 471	664, 218	55, 503	19	29, 750			243, 388	169, 017	75, 100	625	750	1,300	64, 728
Junnison		307, 376	278, 187	20, 539	4	8, 450	1	200	50, 250	12, 331	8, 158, 424	87, 425	2, 781	192, 587	2, 160, 543
Iinsdale		69, 742	69,742	. <i></i> .				200	19,776	9, 406	6, 347, 012	71, 265	7,775	61, 988	1, 347, 093
Lake	,	2, 408, 118	2, 232, 860	41, 831	57	131, 555	1	1,872	568, 963	435, 283	1, 678, 570	22, 275	2,650	12, 915	298, 000
a Plata		26, 482	26,422	60					7, 331	200, 200	27, 348, 594	285, 480	1,014	1,060,082	6, 290, 523
arimer	-,	4, 054	3,934	120					617	798	908, 000	10, 200		1,330	121,027
oray	1 1	824, 492	755, 197	55, 078	9	14, 217			365, 501	100, 678	128, 375	560	• • • • • • • • •	765	12, 295
ark		265, 852	237, 144	16, 658	10	12,050			63, 710	32, 571	11, 724, 187	102, 427	15, 176	204, 361	1, 296, 215
itkin		1, 910, 329	1. 780, 045	48, 924	57	79, 031	3	2,320	482, 648	143, 693	5, 591, 520	63, 150	2, 280	126, 870	809, 440
lio Grande	,	8,410	8, 150	260 .				-,020	1.450	900	18, 112, 513	99, 321	6, 250		3, 076, 969
loutt	12, 955	8, 369	8, 369						4,354	232	781, 250	3, 500	10, 000	3, 000	55, 700
aguache	35, 512	28, 363	27, 363	1,000					4, 194	2, 955	138, 450	2, 575		4,750	
an Juan	526, 667	351, 2 <b>65</b>	293, 011	54, 054	5	4, 200			128, 742	2, 935 46, 660	467, 788	5, 650	400	8, 473	153, 625
an Mignel	587, 000	454, 980	420, 870	25, 100	8	8, 110	1	900	119,571	12, 449	5, 379, 550	70, 725	16, 778	43, 610	993, 782
ummit	586, 682	474, 291	421, 977	32, 955	11	19, 255	1	104	96,606		3, 887, 434	40,650	1, 773	135, 650	904, 400
ndistributed gold.	100,000	100, 000	100,000					102	20,000	10, 180	10, 772, 339	88, 835	6, 765	111, 165	1, 489, 731

# GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued.

 ${\bf COLORADO-Continued.}$ 

	VALUE (	of MINING PROCESSION CONTINUED.	OPERTY—	VALUE OF	F MILL, OR	REDUCTIO:	works.				MOTI	VE POWER.			
COUNTIES.	Mine	Mine	/ / / · · · I	(0.4.)	Build-	Ma-	Sup-	В	oilers.	En	gines.		м	otors.	Number of animals
	supplies.	proper.	Cash.	Total.	ings.	chinery.	plies.	Num- ber.		Num- ber.	Horse power.		Num ber.		
Total	\$719,062	\$105,708,422	\$802, <b>82</b> 5	\$2,432,244	<b>\$69</b> 0, 719	\$1,699,165	\$42,360	622	23, 929	502	13, 972		34	1, 253	1, 10
Boulder	9, 505	6, 556, 674	18,000	257, 750	76, 350	181, 200	209	48	1, 795	36	859	Horse whims, 27.			
Chaffee	32, 269	3, 019, 120	80, 500	26, 200	4,000	21, 650			342	3	129	Horse whims, 2 Whims, 7	1		3
Clear Creek	25, 615	11, 835, 444	132, 250	282, 950	95, 150	185, 850	1, 950	62	2, 037	61	1,384	Windlasses, 6 Water, 2	9 .	270	120
Conejos	850	72, 530						1	15	1	8				
Custer	1,600	1, 125, 510		241,000	75, 700	157, 800	7, 500	26	1,429	15	255	Windlass, 1			(
Dolores	19,740	2, 995, 635	5, 000					4	200	1	33		1	8	30
Eagle	3, 800	2, 148, 315	11, 325	12,600	1, 500	10, 500		22	628	13	272		1	60	
Fremont	500	7, 200				 					(	Windlass, 1 Horse whims, 15.			
Gilpin	282, 750	5, 370, 808	61, 530	409, 490	89, 465	316, 175	3, 850	77	2, 801	53	1, 804	Horse whip, 1 Horse windlass, 1 Windlasses, 41	} 6	194	
Gunnison	80, 235	4, 767, 296	11,360	57, 050	15, 000	42, 600	50	15	343	12	250	Whims, 9 Tunnels, 15 Water, 3 Hoist, 1		10	4
Hinsdale	6, 105	1, 334, 865	1, 700	27, 500	13, 500	14, 000	······	3	75	3	64	Water, 2 Hoisters, 2	 ì		4.8
Lake	<b>52, 97</b> 8	19, 548, 433	110, 084	316, 115	78, 104	228, 651	9, 360	172	7,744	152	0, 265	Windlass, 1 Water wheel, 1	1	36	85
La Plata	1, 090	774, 353						1	7.0	-	C.	Tunnels, 4	'		
1				•••••				1	10			Winzes, 2		••••••	
Larimer	240	114, 515	•••••	•••••	•••••						{	Windlass, 1 Water, 1 Whim,1	} 2	75	4
Ouray	97, 650	9, 919, 194	89, 164	13, 500	5, 000	6, 000	2, 500	30	1,151	14	344	Water, 1 Electric, 1 Gravity, 1 Water, 1	3	73	53
Park	i7, 040	4, 561, 740	11,000	145, 000	35, 300	108, 200	1, 500	20	612	10	645	Windlasses, 2 Whims, 3 Tunnels, 2 Windlasses, 54	2		41
Pitkin	26, 320	14, 432, 087	181, 116	73, 139	30, 350	40, 139	2, 650	78	2,539	81	782	Whims, 9  Drills, 7  Pumps, 6  Compressors, 2  Tunnel, 1	4	30	60
Rio Grande	1, 150 125	707, 900 131, 000		4, 700	2,000	2, 500	200					Windlass, 1			
Saguache	1, 125	298, 515	·····	27, 050	11,000	16,050		5	208	4	161	Water, 2 Whims, 6	1	2	
San Juan	43, 800	4, 192, 355	18, 500	222, 700	67, 200		11,000	12	377	8	141	Water, 2	5	495	4 79
V 14414	20,000	x1 10m, 000	115, 500	, 100	21, 200	142,000	21,000		911	0	721	Tunnel, 1	, "	200	19
an Miguel	3, 990	2, 799, 675	1, 296	105, 500	22, 506	82,000	1,000	9	550	6	78	Hydraulic, 1 Water, 1 Whim, 1	}		360
ummit	10, 585	8, 995, 258	70, 000	210, 600	68, 600	141, 950	50	29	1, 073	29	498	Hydraulic, 2 Windlasses, 8 Tunnels, 2	. 1 .		32
Indistributed gold .												Water,2			•••••

# GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued.

		ODUCED FROM					ЕМІ	PLOYÉS AB	OVE GROUN	D.				
COUNTIES.		OR TREATED 1889.	Ave	rage numl	er employe	e <b>d.</b>	A	verage wa	ges per day		Averag	ge number during	of days we year.	orked
	Gold. (Value.)	Silver. (Value.)	Foremen or over- seers.	Mechan- ics.	Laborers.	Boys under 16 years.	Foremen or over- seers.	Mechan- ics.	Laborers.	Boys under 16 years.	Foremen or over- seers.	Mechan- ics.	Laborers.	Boys under 16 years.
Total	\$1, 984, 159	\$4, 056, 482	128	354	964	2	\$1.64	. \$4. 04	\$3.04	\$1.25	211	203	187	285
Ada	3, 307	65			6				3.00				187	
Alturas	13, 869	465, 946	20	74	57		4.78	4.04	3, 14	,	158	170	150	
Bear Lake					2			 	2, 25				55	
Bingham	20, 236	41	10	51	153		3.50	3,00	2, 50		120	120	86	
Boise	299, 099	248, 474	6	20	46		4.00	4.65	3.47		63	191	182	<u> </u>
Cassia	12,671	18, 419	1	2	5		4.72	3.97	3.01		212	208	189	
Custer	164, 475	728, 627	9	21	76		4.83	4.36	3.00		215	242	265	
Elmore	314, 132	27, 016	5	29	61		5.00	4.25	3, 34		104	177	109	
Idaho	242, 356	12, 001	5	15	39		4.72	3.97	3. 01		212	208	189	
Kootenai	,	8, 500	1	2	4		4.72	3.97	3. 01		212	208	189	
Latah	1,000		[		10				2, 00			<i></i>	60	
Lemhi	377, 868	130,099	15	24	170		4.16	4, 20	3. 09		304	149	190	
Logan	24, 107	419, 450	7	11	42	1	5.07	3.90	3. 50	1.50	323	304	311	310
Owyhee	258, 045	432,777	4.	15	47		5.00	4.33	3, 27		287	287	267	
Shoshone	,	1, 557, 022	34	86	224	1	5. 14	4.33	3. 13	1.00	252	267	234	260
Washington	10, 282	8,045	11	4	22		4. 13	3, 50	2. 92		160	250	55	

					EM	iployés bei	OW GROUND	•				
COUNTIES.	Į	Lverage nun	ber employe	ed.	4	Lverage wa	ges per day.		Average ni	imber of day	s worked du	ring year.
<u> </u>	Foremen or overseers.	Miners.	Laborers.	Boys under 16 years.	Foremen or overseers.	Miners.	Laborers.	Boys under 16 years.	Foremen or overseers.	Miners.	Laborers.	Boys under 16 years.
Total	163	2, 566	318		\$4.79	<b>\$3.</b> 59	\$3.10		247	204	206	
. Ada												
Alturas	45	547	34		4.57	3, 57	3. 26		230	190	144	
Bear Lake		4				3.00				55		
Bingham	1	8	1		4.91	3.50	3. 10		240	217	220	
Boise	11	159	6		5.43	3, 61	3.00		306	257	200	
«Cassia	1	11	1		4.91	3. 50	3. 10		240	217	220	
·Custer	18	245	18		4.91	3.60	3.00	·	345	248	302	
Elmore	13	207	37		4.60	3.49	3.00		167	177	174	
Klaho	6	98	13		4.91	4.00	3. 10		240	22	220	
Kootenai	1	10	1		4.91	3, 50	3. 10		240	217	220	
Latah	1	30				3.00				100		
Lemhi	19	321	44		4. 25	3. 56	3.05		242	194	133	
Logan	5	114	39		5, 10	3.50	3. 23		314	288	110	
Owyhee	10	157	21		4.70	3. 79	3.41		131	196	250	
Shoshone	29	554	103		5. 29	3.57	3.00		311	243	258	
Washington	4	101			4.00	3.75		•••••	330	94		

# ${\tt GOLD\ AND\ SILVER\ STATISTICS\ OF\ THE\ WESTERN\ STATES\ AND\ TERRITORIES-Continued.}$

IDAHO-Continued.

	Total	Number	Mine			NUM	BER OF	MINES PRO	DUCING-			E	KPENDIT	URES.	
COUNTIES.	numbe of mines	r of pro- ducing	WOLKI		iesi Tago	to	\$10,000 to \$50,000.	\$50,000 to \$100,000.	\$109,000 to \$250,000.	\$250,000 to \$500,000,	Grand to of expen- tures.	1: 0120	d total ages.	Total wages paid in 1089.	Paid to contract- ors.
Total	536	421	6:	6 4	6 209	147	42	12	8	3	<b>\$4,</b> 870, 4	84   \$3,6	86, 362	\$3, 331, 151	\$194, 257
Ada		T	-			=				-	2, 5	50	1, 903	1,740	97
Alturas	164	130	19	9 1	5 80	40	9	1			712, 9		4, 861	547, 621	12, 258
Bear Lake	3	1				i i				1	1, 2		1,057	997	150
Bingham	8	8	1	•		i i		1		';	169, 4	- 1	2.820	65,380	20, 299
Boise	60	46		7	7 20		4		. 2		323, 8	.1	37, 628	219, 202	47, 296
Cassia	10	10	1			1	1				23, 2	1	17, 401	15, 856	886
Custer	67	44	18		5 18		5	1	2	1	411, 2	1	2,729	341, 553	1, 176
Elmore	21	18			3   6	- 1	4	2			411, 5	11	2, 273	202, 969	57, 916
Idaho	21	21			10	-	2	1			190, 7		2,706	130, 076	7, 239
Kootenai	9	9				1	-	1			21, 2	27	5, 915	14, 503	810
Latalı	1	1		2		. 1					11, 2		0, 200	19, 200	910
Lemhi		48		- 1 ·	2 25	-	4	2			583, 6	4)	19, 443	394, 899	13, 149
Logan	12	9	1	- 1	2 :	1	2	1		1	314, 1	- 9	3, 090	218, 679	14, 411
-	55	31	17	1	7 12	į.	5	3		1	285, 8	-2	6, 928	210, 878	1, 210
Owyhee	42	1.	i	}	1	1	7	2	4	1		- 1	. 1		
Shoshone	7	38 7	4	4	13	1	•	2	4	1	1, 344, 4 62, 9	11	4, 866 2, 536	905, 596	15, 916
Washington		1			··1'	ن					62, 9	99	2, 330	51, 092	1, 444
		EXI	ENDITU	RES-con	tinued.					VALUE	OF MINING	PROPERTY.			
·		Office f	orce.		The state of the s										
counties.	М	ales.	Fem	iales.	Value of	Other expendi	Tor valu	e of 📗 1	Value of mildings.	Value of railroads on	Machin- ery.	Under ground improve-	Min suppl		
	Num- ber.	Wages paid.	Num- ber.	Wages paid.	supplies	tures.	pla	at.	····	surface.		ments.		p.op.	
Total	104	\$160, 261	9	\$693	\$889, 958	\$294, 164	\$44,19	14, 594	\$1, 012, 677	\$283, 183	\$928, 439	\$8, 295, 875	\$415,6	\$33, 154, 2	16 \$104,570
Ada	!	72		4	469	174	2	1, 798	437	195	499	3, 672	-	201 16, 7	<b>±</b> 0 <b>6</b> 4
Alturas		14, 982			111, 575	26, 536		3,876	140, 922	5, 902	240, 348	4, 674, 838	69. 7		. 1
Bear Lake	:	11,002	.,		175	20,000	5	3, 260	175	5,002	F13, 513	3, 075	à ·	10 10,0	1
Bingham		7, 141			4.714	71, 949	1	5,478	15, 497	75, 336	45, 267	22, 445	7.6		
Boise	j	1, 130			52, 532	3,718	ľ	1,412	44,886	97, 419	90, 887	253, 320	73, 7		-
Cassia	-	658		1	4, 277	1, 589	1	8, 608	3,978	1, 684	4, 547	33, 464			
		008		- 1		488	3	5,412	32, 854	5, 880	43, 218	687, 813	7, 7		
Custer	11	31, 388			68, 030 106, 527	12, 755	1	6, 463	444, 552	3, 990	45, 215 113, 250	420, 230	1		
	į			9		i .		2,776	32,809	1		282, 922	1		i
Idaho	1	5, 382	• • • • • •	1	35, 926 3, 908	12, 985 1, 454	1	1, 605	3, 639	13, 764 1, 541	37, 531 4, 159	30, 607	1.6		1
Kootenai	1	DOT		1		1, 404		7, 000	9, 039	1, 9+1	*, 100	au, uu <i>t</i>	. 2, 0		1
Latah	50	40.510	9	682	1,000	44, 697	1	3, 072	75, 242	974	18, 384	471, 416	1		i
Lemhi	29	40,713	ย	082	89, 549			11	-	1			1 .		ŧ
Logan		1 0/6			63, 139	17, 883		0,140	19, 260	90 950	50, 290 170, 858	317, 790 500, 735	43, 9		1
Owyhee	1	4,840			69, 470	8, 456		5, 608	101, 398 93, 328	30, 250	105, 627	489, 169		1	1
Sho. hone	1	53, 354			280, 444	89, 184		2, 149	95, 328 3, 700	45, 175					1 1
Washington					8, 123	2, 296	1,81	5, 937	a, 100	1, 0×3	3, 574	104, 329	az, e	mr   1,700,4	00

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# GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued.

IDAHO-Continued.

	VALUE	OF MILL OR E	REDUCTION WO	ORKS.				Mot	TVE POWER.			
COUNTIES.	77-4-1	The state			Во	ilers.	Eng	gines.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Мо	otors.	Number of animals.
	Total.	Buildings.	Machinery.	Supplies.	Num- ber.	Horse power.	Num- ber.	Horse power.	Other power.	Num- ber.	Horse power.	ammage.
Total	\$2, 540, 888	\$760, 118	\$1, 599, 888	\$180,882	225	5, 559	80	2, 296		67	3, 274	273
Ada	1, 191	341	763	87		3		2			1	1
Alturas Bear Lake	,	142, 896	367, 513	53, 913	79	919	9	412	Water, 1	5	79	86
Bingham	7, 277	2,084	4, 661	532	1	20		9	Hydraulic, 1		7	16
Boise	216, 401	43, 803	170, 502	2, 096	17	636	13	268	i. N	1		17
Cassia	10, 849	3, 107	6, 950	792	1	31		14			11	1
Custer	2, 205	735	1,470		3	110		{	Water, 1 Whim, 1		368	41
Elmore	232, 750	59, 850	142, 310	30, 590	21	1, 184	21	340 {	Hrdronlia 1	1 .	1, 490	40
Idaho	88, 648	25, 386	56, 785	6, 477	7	249	3	114		2	87	8
Kootenai	9, 909	2, 842	6, 342	725	1	28		13	,		10	1
Latah												. <b></b>
Lemhi	439, 449	198, 940	226, 455	14, 054	19	273	10	418	Hydraulic, 1	34	881	93
Logan	80, 250	24,610	53, 500	2, 140	14	823	12	327	Water, 1	2	56	6
Owyhee	238, 128	70, 785	131, 285	36, 058	19	756	7	99	Water, 1	2	24	ā
Shoshone	598, 969	179, 324	388, 032	31, 613	43	527	5	279	Water, 6	8	260	4
Washington	50, 540	5, 415	43, 320	1, 805					Windlass, 1			4

### MICHIGAN.

										THE PART AND A TOTAL OF THE PA	moto						
			BULLION	PRODUCE	n					EMPLOYE	s above	GROUNI	),			-	
counties.	duced.	Ore sold or treated.	FROM OR		R	Average	numbe	er employe	đ.	Ave	rage was	æs per d	ay.	Avera	age nun rked du	nber o	f days
	(Tons.)	(Tons.)	Gold. (Value.)	Silver. (Value.	Forer or ov seen	er-	echan- ics.	Laborers.	Boys under 16 years.	Foremen or over- seers.	Mechan ics.	Labor ers.	Boys under 16 years.	Foremen or overseers.	Me- chan- ics.	Labo ers.	
Total	31, 865	31, 865	\$87,040	\$18,88	5	2	7	32		<b>\$</b> 3. 25	<b>\$2.</b> 25	\$1.81		312	350	31	9
Gogebic and Marquette.	31,865	31, 865	87, 040	12, 31	7	2	7	32		3. 25	2. 25	1.81		312	350	31	9
Houghton and Ke- weenaw.			]	a6, 56	3								-				
					EMPLO	YÉS BEL	OW GRO	OUND.								•	
COUNTIES.	Aver	rage numl	er emplo	yed.	Av	erage w	agea pe	er day.	Avera	ge number during	r of days 3 year.	1	Total number		er wor	t not	Number of mines
	Foremen or over- seers.	Miners.	Labor- ers.	Boys under 16 years.	Fore- men or over- seers.	Miners	Labor ers.	Boys under 16 years.	Fore- men or over- seers.	Miners.	Labor- ers.	Boys under 16 years.	of mines	mine	- ; p	ro- cing.	idle.
Total	1	40	13		\$2.25	\$2.00	\$1, 80		310	310	310		3		2	1.	
Gogebic and Marquette.	1	40	13		2. 25	2.00	1.80		310	310	310		3		2	1	
Houghton and Ke- weenaw.																•••••	

a Product of copper mines.

# GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued. MICHIGAN—Continued.

				EX	PENDIT	URES.							VALU	E OF	MINING P	ROPERTY.
						Off	ice for	ree,				Machine Company of th	CONTRACTOR OF STREET, SALES	1:	-	1
COUNTIES.	Grand total of expendi- tures.	Grand total of wages.	Total wages paid in 1889.	Paid to con- tractors.	М	ales.		Fen	nales.		Value of applies.	Other ex-	Total value of	f	alue of uildings.	Value of railroads on
			7H 1008.		Num- ber.	Wage paid.	s N	um- Jer,	Wag paid	es		, , , , , , , , , , , , , , , , , , ,	plant.		munge.	surface.
Total	\$99, 183	\$56, 198	\$45, 096	\$10,447	2	\$658	5				<b>\$9,152</b>	\$33, 833	\$676, 212	-   :	<b>\$11,6</b> 00	\$87, 40 <b>6</b>
Gogebic and Marquette.  Houghton and Keweenaw.	99, 183	56, 198	45, 096	10,447	2	65:	)				9, 152	33, 833	676, 212	===	11, 600	£7, <b>4</b> 06
COUNTIES.	v	ALUE OF MIS	NING PROPER	TY—continue	ed.	A consideration of the second	В	oilers	The second second	E	MOT	IVE POWER.			fotors.	Number
	Machinery.		Mine supplies.	Mine proper.	Cı	ısh.	Num- ber.		rse wer.	Num- ber.		Other p	ower.		Horse power	
Total	<b>\$114</b> , 007	\$19, 100	\$18, 690	<b>\$415,</b> 000	\$10	, 409	5		270	7	529					
Gogebic and Marquette.	114,007	19, 100	18, 690	415, 000	10	), 409	5	<del> </del>	270	7	529	Water, 7.				6
Houghton and Ke- weenaw.				·-	·-				•	 		-				

### MONTANA.

COUNTIES.	Total amount of ore pro-	Total amount of ore sold.	Total amount of ore treated.	ASSAY VALUE	OF ORE SOLD.	тот	AL BULLION VAI	.UE.	VALUE OF B	D COINING ULLION PRO- M ORE SOLD.
	duced. (Short tons.)	(Short tons.)	(Short tons.)	Gold.	Silver.	Grand total bullion.	Gold.	Silver.	Gold.	Silver.
Total	528, 518	109, 242	353, 261	\$403, 537	\$3,964,438	\$20,608,287	\$3, 139, 327	\$17, 468, 960	\$383,446	\$3, 766, 218
Beaverhead	26, 712		26, 900			904, 656	35, 602	869, 654	()	
Deerlodge	100, 167	4, 866	81,407	10,042	387, 286	6, 346, 230	136, 748	6, 209, 482	9, 540	367, 922
Fergus	14, 171		13, 671			352, 703	348, 896	3,807	2,1,40	301, 922
Jefferson	65, 098	35, 338	8, 865	308, 640	979, 228	1, 709, 599	297, 420	1,412,179	293, 208	930, 267
Lewis and Clarke	100, 679	3, 000	96, 409	12,000	90,000	1, 707, 642	1, 080, 321	627, 321	11,400	85, 500
Madison	260	20	300	1, 654	800	12, 435	11, 571	864	1,571	760
Meagher	1,484	171	1, 200		2,944	50, 143	342	49, 801	1,,,,,	2,797
Missoula	2, 222	1, 222		5, 000	119, 100	117, 895	4, 750	113, 145	4,750	113, 145
Park	2, 395							,	2,,00	110, 140
Silverbow	215, 330	64, 625	124, 509	66, 201	2, 385, 080	7, 896, 388	377, 509	7, 518, 879	62, 977	2, 265, 827
Undistributed						1, 510, 596	846, 168	664,428	, 011	#, £00, 6£/

	BULLION PR	VALUE OF RODUCED FROM	PLACER	BULLION.	Total produc-			NUMBER C	F MINES PRO	DICING-		
COUNTIES.	Gold.	Silver.	Gold.	Silver.	ing mines reported.	Less than \$1,000.	\$1,000 to \$10,000.	\$10,000 to \$50,000.	\$50,000 to \$100,000.	\$100,000 to \$250,000.	\$250,000 to \$500,000.	Over \$500,000.
Total	<b>\$1</b> , 900, 583	\$13, 038, 314	<b>\$13</b> 0		75	13	21	13	3	9	8	
Beaverhead	35, 602	869, 054			4		1	2				<del></del>
Deerlodge	127,208	5, 841, 560			13	1	2	4	2	1	1	
Fergus	348,896	3, 807			3	1	1			^	,	-
Jefferson	4, 147	481, 912	65		13	2	5	2		1	3	********
Lewis and Clarke	1,068,921	541, 821			5	1	1			1	1	1
Madison	10,000	104			2		2					! <sup>*</sup>
Meagher	342	47,004			4	2	1	1				
Missoula	• • • • • • • • • • • • • • • • • • •				G	2	3			1		
Park	. <b></b>											
Silverbow Undistributed	,	5, 253, 052	65		25	4	5	4	1	5	2	4

GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES-Continued.

MONTANA-Continued.

			~					EMPL	oyés	ABOVE	GROUN	ь.						
COUNTIES.		Aver	age nu	mber emple	yed.		•	Ave	rage	wages	per day	7.	Ave	age nu	ımbe	r of days	worked du	ring year.
	Foremer oversee	or rs. Me	chanic	s. Laborer	s. Bo unde yea	r 16	Foreman Gverseers		echan	ics. L	aborers	Boy unde year	r 16	uen or seers.	Mec	hanics.	Laborers.	Boys under 16 years.
Total		96	307	2, 61	3	5	\$5. <b>3</b> 9		\$4.	14	<b>\$3.</b> 25	\$1.	40	286		296	287	300
Beaverhead		8	7	1,0	1		6.43	-	4.	83	3, 00			228		260	221	
Deerlodge		30	93	1	F		5. 29		4.		3. 15			317		334	326	
Fergus		6	20	7	5		6.00		4.	00	3.00			220		175	120	· • • • • • • • • • • • • • • • • • • •
Tefferson		12	14	10		1	4.31		3.		3, 25	1	00	250		236	295	254
Lewis and Clarke Madison		12	49 1	1	3		6. 23		4. 3.		3. 27 3. 00			350		325 250	353 238	
Meagher		1	1		2		4.00	-	5.	(	3.00	1		125		20	125	
Missoula		4	3	1	8		4.00	1		00	2.87	1		161		164	161	
Park				•-	2						3.50						20	
Silverbow		23	119		1	4	5. 43		3.	93	3.49		50	298		291	290	312
Undistributed	· · · · · · · · ·	••••	• • • • • • •	1, 57	9			•-			3. 25	·		!			287	
					Divor									1		li		
					EMPL	OXES	BELOW GRO	JUND.	·					1				
COUNTIES.	Avera	ige nun	aber em	iployed.	Ave	rage v	vages per (	lay.		Avera		ber of da	ys worked •	Tot num		Numbe of pro-	WOTE IN	
	Dono		Ī	Down				Тъ.		T7	Ī		n	of mi	nes.	ducing mines	produc.	idle.
-	Foremen or over-seers.	Miners	Laborers.		Foremen or over- seers.	Mine	ers. Labor- ers.	un 1	der 6 irs.	Fore- men or over- seers.	Mine	rs. Lab					mg.	
Total	65	2, 552	254	5	<b>\$</b> 5.11	\$3.4	8 \$3.13	\$1.	75	303	29	5 29	2 324	1	114	75	26	13
Ceaverhead	7	414	60	1 1	6.00	3.5				300	29	- 1		-	4	4	1	.
Deerlodge	20	667	22 30	1	5. 03	3.5				322	33		š	1	25	13		1
Fergus Jefferson	14	89 356	29	1 1	4.82	3. 2	1			313	. 14 27	1	1	1	4 21	13	!	
Lewis and Clarke	3	146	61	1 (4	6.00	3.4				362	33	1		1	7	5		1
Madison	1	6			3.00	3.0	0	.  <i>.</i>		• • • • • •					2	2	:	
Meagher	1	14			4.50	3.5		· ····		280	22	4		1	10	4		-
Missoula	4	51 30	11		5. 42 5. 00	3.4				168 133	17	6 17 4	1		8 1	6	. 2	
Park	14	779	41	5	5.00	3.7 3.5	i	1	75	306	30		2 324	1	32	25		
Undistributed														.l				
	}								1.				i.	1		<u> </u>		
					EXPE	DITU	RES.							VAI	LUE (	OF MININ	G PROPERTY	ī.
							Office fo	rce.										
COUNTIES.	Grand total of expend	i- to	rand tal of tges.	Total wages paid in 1889.	Paid to con- tractors.	7	Iales.	Fe	males		lue of plies.	Other- expendi- tures.	Total value of plant.	Val of bu	ıild-	Value or railroads on sur-		Under- ground improve-
	tures.				A	No.	Wages paid.	No.	Wag paid							face.		ments.
Total	\$9, 259, 6	\$6,1	23,132	\$5, 881, 500	\$120, 567	52	\$120, 815	1	\$25	\$2,3	99,953	≱736, 5 <b>6</b> 2	<b>\$53,256,39</b> 6	\$494,	619	\$312, 150	<b>*1,642,241</b>	\$11,352,90
Beaverhead	791, 5	11	0, 706	600, 979	9,727		·				246	180, 565	3, 236, 675			57, 590	1	184,00
Deerlodge	2, 107, 70	11	8, 024	1, 212, 669	31, 126	12	24, 229 1, 400			1	19, 000 14, 760	70, 738 188, 717	26, 599, 089 316, 512	ž.	979   000	152, <b>44</b> 3 512	1	6, 571, 00 31, 59
Fergus	394, 77 $721, 20$	11	1, 301 7, 582	110, 220 476, 625	19,681 15,854	4 8	1, 400 24, 853	1	25	11	5, 713	37, 974	4, 634, 700	4	300	35, 100	1 .	556, 70
Lewis and Clarke	1,001,4	11	8, 942	487, 389	18,000	12	33, 553			1.	5, 280	87, 253	2, 847, 724	13	655	62, 220		135. 42
Madison	8, 6	11	7, 775	7,775		<b></b>				· <b>-</b> -	800	81	1, 200, 000	2,	100		. 8, 100	31,50
Meagher	14, 9	17	3, 415	13, 415		<b>-</b>	.[			( )	1, 350	225	777, 930	£1	400	200		28, 83
Missoula	50, 0	16	0, 612	37,712	300	2	2,600	• • • •		11	9,400		1, 063, 150 850, 550	1 .	200	1,000		50,00
Park Silverbow	10, 88 2, 657, 70	11	9, 438   4, 741	9, 063 1, 415, 057	375 25, 504	14	34, 180			11	1, 300 2, 108	150 170, 856	659,550 $11,921,066$		$050   \\ 285  $	8, 175	1,450 1,030,228	64, 60 3, 689, 35
MOVERDOW	J. 001.11	re/   1, <b>1</b> , 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	7. 171	エッセエリ ひびき		14	UT, 100			1 11		_, , , , , , , ,	a,,	4 - 0,	-00	2, 110	-, 000, 000	~, ~~, 000

# GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued. ${\tt MONTANA-Continued.}$

	VALUE OF	F MINING PI continued	OPERTY—	VALUE OF	MILLOR	REDUCTION	WORKS.				MOTIVE	POWER.			
COUNTIES.	Mine	Mine						Boi	ilers.	En	gines.		Mo	tors.	Num- ber of ani-
	supplies.	proper.	Cash.	Total.	Build- ings.	Ma- chinery.	Sup- plies.		Horse power.	Num- ber.	Horse power.	Other power.	Num- ber.	Horse power.	mals.
Total	<b>\$546, 605</b>	\$38.646,253	\$261, 620	\$3,314,577	\$1,179,919	\$1,861,946	\$272, 712	145	8, 266	86	4, 239		5	<b>15</b> 8	26
caverhead	58, 075	2, 645, 600	115, 000	616, 400	120, 750	494, 500	1, 159	8	414	2	58	Water, 2		115	43
eerluige	50, 804	10, 570, 359	32, 576	760, 019	192, 256	476, 357	91, 406	20	965	11	580 {	Whims, 2 Windlass, 1	}		118
ergns	.,			74,000	25, 200	41, 300	7, 500	4	280	3	180				11
efferson	54,500	3, 637, 900	200	248,000	65, 000	175, 000	8, 000	14	785	13	392	Whims, 3		<i></i>	17
ewis and Clarke .		2, 363, 963	35, 441	26, 718	10, 980	14, 640	1,098	4	113	2	48 {	Whim, 1	}	18	7
Ladison	2, 000	1, 156, 350		12,500	4,000	8,000	500	2	50	3	54				
leagher	8, 025	727, 625					<b></b>					Whim, 1			1 1
lissoula	1, 625	992, 250	<b>6</b> , 000	4, 925	2, 400	1, 500	1, 025	2	100	1	40 {	Whims, 4 Windlass, 1	}	· · · · · · · · ·	
ark	5, 775	585, 675						1	12			Windlass, 1			
ilverlow relistributed	25 3, 444	6, 689, 181	72, 403	1, 572, 015	759, 333	650, 649	1 <b>6</b> 2, 033	90	5, 547	51	2, 887	Whim, 1	5	25	57

### NEVADA.

COUNTIES.	Total amount of ore pro- duced.	Total amount of ore sold.	Total amount of ore treated.	ASSAY VALUE	of ore sold.	тот	AL BULLION VA	LUE.	VALUE OF E	ED COINING SULLION PRO- M ORE SOLD.
Market Co. and	(Short tons.)	(Short tons.)	(Short tons.)	Gold.	Silver.	Grand total bullion.	Gold.	Silver.	Gold.	Silver.
Total	352, 591	6, 695	394, 855	\$211,463	\$647,750	<b>\$9</b> , 578, 536	\$3, 506, 295	\$6,072,241	\$200, 890	\$615, 362
Churchill	475 210		428 100 1			28, 250 3, 631	1, 428 3, 585	26, 822		
Elko Esmeralda	12, 282 16, 128	1, 091	6, 250 15, 737	151, 648	90, 639	837, 561	261, 653	575, 908	144, 066	86, 108
Eureka	16, 360 984	3, 021 124	15, 161 150	48, 093 207	168, 959	653, 688 1, 239, 243	111, 764 178, 946	541, 324 1, 060, 297	45, 688	160, 509
Lander Lincoln	10, 441 4, 152	455 876	9, 986	200	10, 570 111, 622	11, 730 194, 147	447 88, 106	11, 283 106, 041	197 190	10, 042 106, 041
Lyon	2, 511		3, 263 52, 960	6,942	43, 582	158, 326 249, 135	65, 546 103, 251	92, 780 145, 884	6, 595	41, 403
Nye	3, 217 282, 575	830	288, 154	3, 958	191, 120	185, 324 5, 739, 049	3, 760 2, 510, 998	181, 564 3, 228, 051	3, 760	181, 564
Washoe	326 2, 930	298	326 2, 340	415	31, 258	11,046 118,006	10, 896 15, 915	150		
Undistributed gold	•••••					150,000	150,000	102, 091	394	29, 695

COUNTIES.	BULLION PR	VALUE OF ODUCED FROM REATED.	PLACER	BULLION.	Total produc-		3	NUMBER	OF MINES PR	ODUCING—		
, other and	Gold.	Silver.	Gold.	Silver.	ing mines reported.	Less than \$1,000.	\$1,000 to \$10,000.	\$10,000 to \$50,000.	\$50,000 to \$100,000.	\$100,000 to \$250,000.	\$250,000 to \$500,000.	Over \$500,000.
Total	\$3, 143, 405	\$5, 450, 415	\$12,000	\$6,46 <b>4</b>	171	47	69	29	12	9	2	
Churchill	1,428	26, 822			3		2					
Donglas	3, 585	46			2		2	1				
E!ko		489, 800	•••••		3		1	1	**********			•••
Esmeralda	1	541, 324			12		3	7		***************************************		
Eureka	1 , ,	899, 788			56	32	17	4		2	1	
Humboldt	1	1, 241		• • • • • • • • • • • • • • • • • • • •	4	1	3			2		
Lander			· • • · · · · · · · · · · · · · · · · ·		6	1	1	2	2			
Lincoln	1,	51, 377		• • • • • • • • • • • • • • • • • • • •	8	1	4	2	1			**********
Lyon Nye		145, 884			10		3	4	2	1		
Storey		4			30	11	17		2			
Washoe.		3, 228, 051 150		• • • • • • • • • • • • • • • • • • • •	20	• • • • • • • • • • • • • • • • • • • •	7	3	3	4		9
White Pine		65, 932	12,000		2		2	· · · · · · · · · · · · · · · · · · ·				
Indistributed gold		00, 862	15,000	6, 464	15	1	7	5	1	1		
	1				*******							• • • • • • • • • • • • • • • • • • • •

# GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued. NEVADA—Continued.

							NEVADA	L—Con	itinued	۱.								
							1	EMPLOY	ÉS AB	OVE G	ROUNI	).						
COUNTIES.		A ver	age num	ber emplo	yed.			Avera	age wa	ges pe	er day	•	Avera	ge numb	er of da	ys w	orked dur	ing year.
	Foremet oversee	or rs. Me	chanies.	Laborers	Boy under year	16	Foremen o		hanies	. Lal	orers.	Boys under years	16 Foreme		chanies.	La	borers.	Boys under 16 years.
Total		83	261	770	,	1	\$5.07		\$4.56		<b>*3.</b> 22	\$2.0	υ :	104	298		270	<b>36</b> 5
Churchill	-	1	1	c c	1		3.00		4,00	7,	3. 00			180	150		139	
Douglas Elko		5	54.	56	1		4. 60		4.47	•	3.00 3.50		•••∥•••••	331	283	-	225 299	
Esmeralda	1	8	32	63	1		4.94		4. 28	1	3, 21		11	267	284	İ	291	· · · · · · · · · · · · · · · · · · ·
Eureka		9	17	120	:		5.72	ļ	4.03		3, 20		îl	295	238		308	
Humboldt			4	10	į.			••	3.63		2.00				215		198	
Lander		5	11	23		****	6. 90	1	3.96	:	2, 13		li .	354	199	1	190	• • • • • • • • • • • • • • • • • • • •
Lincoln Lyon		8	19 5	43 110	1	1	4.71	1	3. 97 3. 65		2.47 2.12	2.0	4!	216	352 200	1	297   181	365
Nye		3	2				4.33		4.00				ł i	299	365		101	
Storey	1	33	111	167	·		5.04		5.04	1	3.88		11	323	330		317	
Washoe										-,						-		
White Pine		5	5	45			4. 55		3, 90	İ	3, 25			300	223		180	
Undistributed gold				137						-	3. 22					-	270	
	Ì				PMDI	ovés	BELOW GR	Orman										
					EMP1.	OYES	BELOW GE	ound.										
			.1						A	verag	e num	ber of da	ys worked		Nun	aber	Mines	37 - 1
COUNTIES.	Aver	agə nun	aber emp	noyea.	Ave	rage v	wages per d	iay.			dur	ing year.		Total number	of of I	ro-	working but not	of mines
	Fore-	Ī	T	Boys		ī	1	Boy	s F	ore.			Boys	mines.	mir		produc-	idle.
	men or	Miners	Labor-	under 16	Foremen or over-	Mine	rs. Labor-		er   me	en or	Mine	rs. Labo	r   under					
	seers.		ers.	years.	seers.		613.	year		ers.		ers	years.					
Total	84	2,003	214	1	\$4.83	\$3. 6	82. 91	\$1.50	0	312	28	9 24	30	245		171	44	30
Churchill	1	6			4,00	3. 0	0			360	34	10		3		3		
Douglas	1	13				3.0	1					30		7	1	2	3	2
Elko	5	174			4.50	3.4	9		]	362	31	4		7		3	3	1
Esmeralda	14	22 <b>4</b>	16		4.83	3.0	1		31	283	28	1	1	19	1	12	3	4
Eureka	4	175	153		5, 29 3, 94	3.0	i i		- 11	286 229	22	1	j 1	68 12		56	9	3
Lander	3 2	30 113	6		4.62	3.3	- (		L!	274	17 24	1	1 1	10		4 6	5 3	1
Lincoln	7	77	11		4. 21	3.0	Į.		il.	309	32	1	1	13		8	3	2
Lyon				.							<b></b>			12		10		. 2
Nye	2	132	4	1	5.00	3.3	1	1.50	li.	280	18	1	1	39		30	4	5
Storey	42	980	8		5. 12	4.0	,		11	336	32	1	)	33		20	8	5
Washoe	1 3	13 66	12		4.00 3.67	3.5 3.0		1	1!	300 188	21 21	1		3 19		2 <b>1</b> 5	1 2	9
Undistributed gold	1	00	12		ə. u <i>i</i>	3.0	2.92			100		.2 20	3	19		10		
Entering Porce																		
					EXPE	NDITU	RES.							VALUE	OF MIN	NG P	ROPERTY.	
							Office f	orce.							_			
COUNTIES.	Grand t	otal (	Frand Otal of	Total wages paid	Paid to con-	- M	fales.	Fema	ales	Valu		Other expendi-	Total value of	Value	1 1 01 1	ail-	Machin-	Under- ground
	tures		rages.	in 1889.	tract-					-	lies.	tures.	plant.	inga		s on ace.	ery.	improve- ments.
	1		İ			No.	Wages paid.		Vages paid.		į							
Total	\$8, 254,	755   \$3	764,256	\$3, 522, 280	\$30,011	119	\$203, 385	-	2, 580	\$2,32f	9,607	2,160,892	\$25, 049 <b>, 6</b> 95	\$476, 3	31 <b>\$16</b> 0,	524	<b>\$1,278,072</b>	<b>\$7,445,625</b>
Churchill	10	080	12, 260	12, 260						A	, 000		31, 000	1, 0	<u> </u>		1,000	16, 000
Douglas		383	3, 785	12, 260 3, 785	1 :	1				*	598 .		439, 747	11	•		1, 000 755	8, 950
Elko	640,	- 11	354, 183	344, 683		8	9, 500			258,	475	36, 763	1, 875, 972	11	1	329	86, 306	613, 345
Esmeralda	542,	11	338, 776	315, 417	4, 144	10	19, 215			145	472	58, 691	1, 743, 048	47, 5	00 2,	300	80, 950	353, 200
Eureka	662,	Lt.	358, 205	317, 626	13, 945	19	26, 634	• • • •   • •			820	78, 194	6, 400, 132	11	i .	500	129, 804	1, 996, 249
Humboldt	38,4	- 11	28, 385	27, 185	5 040	1	1, 200   .				190	1,850	660, 560	11 '	1	200	7,410	176, 700
Lander Lincoln	164, 8		125, 362	109, 996	5, 342 6, 700	12	10, 024   - 23, 140   -		•••••		, 878 , 023	17, 623 9, 846	939, 500 862, 538			770	77, 000 215, 150	106, 900 134, 110
Lyon	329, 211, 3	8.1	186, 320 91, 413	156, 480 84, 813	6, 700	4	6,600				125	20, 966	201, 700	11	1		4, 975	25, 000
Nye	136,	• (	107, 753	97, 493	(	8	10, 260				, 370	9, 189	2, 741, 535		1	200	20,850	561, 045
Storey	5, 192,	E)	911, 893	1, 809, 844	i !	48	93, 589	1 :	2, 580	1, 369	. (	, 911, 836	7, 757, 378	11	1 -	100	635, 637	3, 282, 626
Washoe	12,	El	10, 680	10, 680					,	ì	340	120	22, 320	11		100	********	yas ===
White Pine	144,	1)	85, 241	82, 018	1 1	4	3, 223			43,	, 070	15, 823	1, 374, 270	15, 2	38 120,	125	18, 235	181, 500
Undistributed gold	150,	טטט	150, 000	150, 000			-		•••••	!								1

### GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES-Continued.

NEVADA-Continued.

	VALUE O	F MINING PR continued.		VALUE O	F MILL OR	REDUCTION	WORKS.				MOTIV	E POWER.			
OOUNTIES.	Mine	Mine			Build-	Machin-	Sup-	Во	ilers.	En	gines.		М	otors.	Number of ani- mals.
	supplies.		Cash.	Total.	ings.	ery.	plies.	Num- ber.	Horse power.	Num- ber.	Horse power.	Other power.		Horse power.	
Total	\$348, 854	\$15,202,039	\$138, 250	<b>\$1,818,176</b>	\$458,881	\$1,187,352	\$171, 9 <b>4</b> 3	189	9, 283	139	11,048		34	705	233
hurchill	1,500	21, 500		23, 500	2,000	18,000	3, 500	1	60	1	16				24
Oougias	1, 127	427, 550	115	3, 608	1,300	2, 100	208	3	22	2	18	Windlass, 1			
lko		1, 117, 350	4	375, 500	126,000	246, 500	3,000	9	425	6	293	Whim, 1			
Ssmeralda	9, 898	1, 231, 410	17,790	252, 207	98, 546	124, 859	28, 802	9	445	7	553	Whims, 2	1	132	4.0
lureka	98, 637	4, 118, 900	5, 357	323, 693	53,400	240, 593	29, 700	23	742	20	774	Air compressor,1.  Hand, 2  Whims, 9  Whips, 6	15	17	3:
lumboldt	135, 900	329, 500	2, 500	39, 225	10, 125	26, 600 -	2, 500	2	74	3	86		3		,
ander	8,740	724, 160		74, 632	12,800	51, 200	10, 632	7	540	6	233			200	1.
incoln	16, 096	<b>411, 4</b> 05	34, 917	177, 153	36, 200	110,000	30, 953	13	450	8	259 {	Windlasses, 2	}		2
yon	1, 500	167, 825		76, 293	17,800	39, 300	<b>19</b> , 193	3	120	3	198	Hand, 1	4	275	3.
Tye	8, 425	2, 123, 740	3, 000	175, 100	49, 200	121,800	4, 100	15	655	6	499	Whime, 4 Windlass, 1 Water, 1	} 3	4.	1:
torey		3, 481, 707	74, 313	165, 105	27, 200	122, 900	15, 005	95	5, 382	70	7, 576	Air compressors,4 Water, 6 Whim, 1	6	76	20
Vashoe	200	21,000	· • • • • • • • • • • • • • • • • • • •	5, 000	2,000	3,000			· • • • • • • • • • • • • • • • • • • •			Whim, 1	1		4
Vhite Pine	12, 896	1, 025, 992	254	127, 160	22, 310	80, 500	24, 350	9	368	7	642	Whim, 1 Water, 4 Windlasses, 4	1	1	10
Indistributed gold															

### NEW MEXICO.

COUNTIES.	Total amount of ore pro-	Total amount of	Total amount of	ASSAY VALUE	of ore sold.	тот	AL BULLION VALU	Е.	VALUE OF B	d coining Ullion peo- m ore sold.
	duced. (Short tons.)	ore sold. (Short tons.)	ore treated. (Short tons.)	Gold.	Silver.	Grand total bullion.	Gold.	Silver.	Gold.	Silver.
Total	105, 870	40, 501	58, 486	\$137, 562	\$1, 288, 485	\$2, 433, 233	\$815, 655	\$1,617,578	\$130,684	\$1, 224, 062
Bernalillo	769		650			8,740	6,740			
Colfax	1, 051		476			23, 221	23, 166	55		
Donna Ana	7, 337	7, 275			76, 868	73, 025		73, 025		73, 025
Grant	63, 428	17, 483	44,078	31,052	346, 680	1, 121, 237	436, 025	685, 212	29, 500	329, 346
Lincoln	6, 550		5, 800			55, 208	52, 100	3, 108		
Rio Arriba	600		800			5, 340	5, 240	100		
San Miguel										
Santa Fe	4, 065	2, 907	643	17, 600	53, 175	92, 216	41, 694	50, 522	16,720	50, 517
Sierra	11, 461	7, 045	3, 589	88, 766	740, 562	844, 081	135, 933	708, 148	84, 328	703, 534
Socorro	10,609	5, 791	2, 650	144	71, 200	112, 165	14, 757	97, 408	136	67, 640
Undistributed gold						100, 000	100, 000			

# GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued. NEW MEXICO—Continued.

COUNTIES.	BULLION	ING VAL VPRODU- E TREA	CED FROM	PLAC	ER BULLIO		l'otal pro- ducing				NUMBER	OF MIN	es pr	орисі	NG—		
	Gold	1.	Silver.	Gold	Silv	ver.	mines re- ported.	Less tha \$1,000.	<b>и</b>	to 0,000.	\$10,000 to \$50,000.	\$50,0 to \$100,0	1	t	0,000 0,000.	\$250,000 to \$500,000.	Over \$500,000.
Total	\$541, 8	80 \$	393, 516	\$43, 59	)1		129	28	3	56	34		7	and the second	3	1	
Bernalillo	6, 7	740					3	The second second		2 .				Man			
Colfax	7, 7	- 1	55	15, 43	i1		6	i.	2	3	1						
Donna Ana							3	]	ı	1 .			1				
3-rant	401, 8	525	355, 866	5, 00	0		55	15	2	24	15		2		2 .		
Lincoln	52, 1	100	3, 108		··· ····		4			2	2						
Rio Arriba	2, 1	100	100	3, 14	10		4	2	2	2 .							
San Miguel		1	••••		•			· <i></i> ·					••••				
Santa Fe	19, 9		5	5,00	T .		11		3	7	1	ĺ	1				
Sierra	36, 6	1	4, 614	15, 00	00		29		3	11	10	1	3		1	1	· · · · · · · · · · · · · · · · · · ·
Socorro	14, €	1	<b>29, 76</b> 8				14		5	4	5					••••••	
Undistributed gold			• • • • • • • •						··· ·•••	••••••						• • • • • • • • • • • • • • • • • • • •	
					and the second second second second		1	EMPLOYÉS	ABOVE	GROUND.	**************************************						
COUNTIES.		Ave	rage num	ber emple	yed.			Average	wages	per day.		Avera	ge nu	ımber	of days	s worked di	iring year.
	Foreme overse	n or ers.	echanies.	Laborer	s. Boy unde year	r 16 📑	Foremen o overseers		nies. L	aborers.	Boys under 16 years.	Foreme overse	en or ers.	Mech	anics.	Laborers.	Boys under 16 years.
Total		45	90	52	0	13	<b>\$4.</b> 09	\$3.	50	\$2.31	\$1.27		169		193	204	16
Bernalillo			2		4			. 2.	00	3.00					60	50	
Colfax		7		4	1		3.93			2.23			151			186	
Donna Ana		2	2		6		4,00	4.	00	3.00		.]	180		300	300	
Grant		13	44	9.	3	8	4.39	3.	32	2.09	1.19		163		170	208	22
Lincoln		6	4	1	9	2	3, 08	3.	38	2.55	1,00	†i	115		133	138	3
Rio Arriba		1	4		i	••••	2.00	3.	50	1.50		.[ :	200		284	241	
San Miguel						•••••				• • • • • • • • • • • • • • • • • • • •						•••••	
Santa Fe		3	10	6		•••••	3, 83		90	2.14		11	214		242	248	
Sieгга		7	20	4	1	1	4. 18	,	76	2, 64	2.00	11	211		219	194	4
Socorro		6	4	2	1	2	5. 07	3.	88	2.71	1.50		178		176	165	13
Ondistributed gold			•••••	21	2					2.31					•	204	
					EMPL	oyés b	ELOW GRO	ound.									
COUNTIES.	Aver	age nur	nber emp	loyed.	Ave	rage w	iges per d	ay.	Avera		er of days og year.	worked	nnn	tal aber	Numb of pro	- WOLKIN	g Number
·	Fore- men or over- seers.	Miners	Labor- ers.	Boys under 16 years.	Foremen or over- seers.	Miner	Labor- ers.	Boys under 16 years.	Fore- men or over- seers.		Labor- ers.	Boys under 16 years.	min	f ies.	dućin mines	5   mendere	- idle.
Total	48	1, 202	154	12	<b>\$4.</b> 15	\$3.15	\$2, 26	\$1.21	233	214	228	211		250	129	9 57	6
Bernalillo		21	1			2, 48	3.00			. 59	6		l	5	, ;	3 1	
Colfax	2	13			4. 50	2.75			265	219	;		1	8		6   2	
Oonna Ana	1	45	4		4.00	3.40	3.00		300	280	300		l	4	:	3	
rant	15	440	86	12	3. 93	3.03	2.16	1.21	244	230	206	211		89	5	5 11	:
incoln	5	69	3		3. 60	2, 93	2.50		185	168	312		l	37		4 18	.   .
Rio Arriba		2			• • • • • • • • • • • • • • • • • • • •	2.00				. 350			l	4	•	4	
an Miguel		6				3.00				. 47			l	3		2	ļ.
anta Fe	5	85	6		3.82	3. 10	2. 50	[	264	253	312			11	11	1	
ierra	13	385	42		4.69	<b>3.3</b> 8	2. 41		235	211	243			69	20	;	2
ocorro	7	136	12		4.14	3.08	2.00		200	179	261		Ū	20	. 14	4	

## GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued,

NEW MEXICO—Continued.

				EXP	ENDIT	CRES.							VALUE OF	MINING P	ROPER	TY.	The state of the s
						Office	force.	,					The state of the s				!
COUNTIES.	Grand total of expendi-	Grand total of wages.	Total wages paid in 1889.	i i acc-	<u>1</u> M	lales.	Fe	males.	Valu of su plies	p. expe	ndi-	Total value of plant.	Value of build- ings.	Value o railroad on aur-	н Ма	ehin- ry.	Under- ground improve-
	tures.	Wages.	14 1000.	ors.	No.	Wages paid.	No.	Wages paid.	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		·	1.202.	18	face.			ments.
Total	\$1,730,120	\$1,333,462	\$1, 226, 857	<b>\$55, 383</b>	30	\$49, 454	2	\$1,768	\$270,7	06 \$125,	958	18, 268, 499	\$256, 349	<b>\$15,000</b>	\$88	1, 045	<b>\$</b> 2, <b>4</b> 13, 506
Bernalillo	6, 43	3,598	3, 598		L TOTAL STATE OF			1	2, 7	83	80	135, 040	2,500			1,770	12, 000
Colfax	1 -1		1		1	1. 100	1		7,4	i	879	730, 250	16,050	100		5.509	50,000
Donna Ana	00,01	11	•	1 '	1	3, 100			6,6		500	227, 150	1, 300	1		2. 150	40,000
Grant	i	- 11	,	1	7	11, 945	1		119, 6		342	7, 891, 271	98, 730	8, 378		9, 160	1, 090, 658
Lincoln	63, 643	15	1		2	3,600	1		5, 1		598	906, 627	4, 100	700	1	8, 450	130, 790
Rio Arriba			1		, -	0,000			7, 8	i i	623	138, 440	1,500	100	i	7, 500	21,060
San Miguel		11 '	1	1	•••••	• • • • • • •			11	50	0.0	15, 000	300	200	4	1,000	1,000
Santa Fe		11	1	i	1	3, 000		!	17.4		578	1, 822, 575	20,500	25	1	8. 275	42, 800
Sierra	1	11 '		1	14	24, 805			69, 9	1 1		5, 220, 946	62, 619	4, 500		9, 140	904, 708
Socorro	1	11	1	1 .	5	5,004	2	1, 768	33,5	i i	907	1, 181, 200	48,750	1,000		9, 100	120,550
Undistributed gold		11	1	1		. O. O. O.	*	1,196	00,0	10,	٠,۱	1, 101, 200	10,105				120,00
•	VALUE OF MINING PROPERTY— continued.				MILL	OR REDUC	TION V	WORKS.				MOTIV	E POWER.				- Num
COUNTIES.									Boi	lers.	E	ngines.			Mo	tors.	ber of ani- mals.
	Mine supplies.	Mine proper.	Cash.	Total.	Bui ing		achin- ry.	Sup- plies.	Num- ber.	Horse power.	Nur ber		Other po	9		Hors powe	e
Total	\$312,822	\$14,273,655	\$116, 122	, 079, 910	\$201	, 540 \$82	29, 150	\$49, 220	100	3, 773	6:	2 1,912					200
Bernalillo	120	118,650		5, 100	1	, 100	4,000		1	20		1 20					8
Colfax	1	586, 200		13,750	t (	- 1	1,000	50	7	432	:	3 32					
Donna Ana		183, 400				· 							Whim, 1.				) 1
Grant	275, 275	6, 245, 073	14, 000	667, 033	164	, 190 46	89, <b>6</b> 50	<b>33, 19</b> 3	49	1, 847	33	3 1, 211	Windlasse Whims, 5	11.5	;····	<b>.</b> .	127
	1,427	761, 160		30,000	2	,500 2	25, 000	2, 500	5	240		5 91			. <b></b> :.		10
Lincoln	900	107, 400	40	9, 100	1	400	7,500	200	4	73							] 4
			: <b>}</b>	20, 300		300 2	20, 000		1	80			· · · · · · · · · · · · · · · · · · ·				(
Rio Arriba		13, 500			11		<b></b>	.	4	111	:	1 80	Whims, 2				20
LincolnRio Arriba San Miguel Santa Fe	1,025	13, 500 1, 249, 950															
Rio Arriba San Miguel Santa Fe	i	1	84, 082	273, 800	14,	300 25	57, 000	2, 500	27	900	10	6 433	Whims, 3.				18
Rio Arriba San Miguel	1, 025	1, 249, 950	84, 082 18, 000	273, 800 60, 827		·	57, 000 35, 000	2, 500 10, 777	27 2	900 70	li .	6 433 2 45	Whims, 3. Windlass, Whims, 2	1	}		1

### OREGON.

				A Marie Co. Co. Co. Co. Co. Co. Co. Co. Co. Co.	Management and states				toron of the management of the con-	
COUNTIES.	Total amount of ore produced.	Total amount of ore sold.	Total amount of ore treated.	ASSAY VALUE	of ore sold.	TOTAL	BULLION VALU	JE.	VALUE OF B	D COINING ULLION PRO M ORE SOLD
	(Short tons.)	(Short tens.)	(Short tons.)	Gold.	Silver.	Total.	Gold.	Silver.	Gold.	Silver.
Total	32, 809	387	26, 698	\$14,361	\$19,768	<b>\$987, 691</b>	<b>\$964,</b> 309	\$23, 382	\$13,642	<b>\$</b> 18, 78
Baker	9,598	40	8, 584	5, 084	318	308, 719	307, 097	1,622	4, 830	30
oos						21, 327	21, 327			
rook	3	3		316		300	300	• • • • • • • • • • • • • • • • • • • •		
Curry						4,879 2,500	4, 879 2, 500			
Donglas	2, 435	300	695	6,500	19, 040	93, 553	73, 613	19, 940	6, 175	18, 08
ackson	490		80			31, 438	31,433	5	·····	
osephine	631	. 41	48	2, 111	410	49, 915	49, 525	390	2,005	39
are										
inn	130		130			38, 350	38, 350			
nion	19, 522	3	17, 161	350		236, 710	235, 285	1,425	332	
Indistributed gold .						200, 000	200,000			

# GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued.

						•	OREGON	V—Contin	med.		,						
COUNTIES.	COINING LION PR ORE		FROM	PLACE	R BULLION	1	Total produc- ing				NCMBER (	)F MINES	PRODU	JCING-			
	Gold.	. s	ilver.	Gold.	Silve		ines re- orted.	Less tha \$1,000.	LIE !	,000 to 1,000.	\$10,000 to \$50,000.	\$50,00 to \$100,00		\$100,000 to \$250,000.	1	0,000 0 0,000.	Over \$500,000.
Total	\$294, 45	51	\$4, 602	\$456,21	8		200	12	2	63	13		2		•		
Baker Columbia	136, 06	J	1, 320	166, 20	4		34		9	19	5		1				
Coos				21, 32	7. ]		25	2	4	1							
Grook			·		• • •   • • • • • • •		1		1						}		
Curry	ı			4, 87	1		6		6						;		
Douglas	l.	1		2,50	- 1		5		5								· · · · · · · · · · · · · · · · · · ·
Grant	12, 19	1	1,852	55, 24			31		0	19	2						
Jackson	5, 7,	}	5	25, 67	1		24	1	8	5	1		•••				
Josephine	1,4	,		46, 12	0		36	2	3	13							· · · · · · · · · · · · · · · · · · ·
Lane					• • • • • • • • • • • • • • • • • • • •												
Linn Malheur	1, 3			97.00		·····	22		0	2			•			• • • • • • •	
	- 137, 68	1	1, 425	37, 00 97, 26	1	}	16	<b>\</b>	6	4	5		1			• • • • • • • •	
Union Undistributed gold	- 157,00	0+	1,420	51, 20			10		<b>u</b>	*	J	,	1				
(Thank tributed gold					•••												
							I	EMPLOYÉS	ABOVE	GROUND.							
COUNTIES.		Aver	age num	ber emplo	yed.			Average	wages	per day.		Avera	ge nun	iber of da	ya wo	ked då	ring year.
	Foremei oversee	n or ers. Me	chanics.	Laborer	Boy under year	16	oremen ( overseers	Mecha	nies. L	aborers.	Boys under 16 years.	Foreme overse	n or	fechanics	Lab	orers.	Boys under 16 years.
Total		59	132	1, 490		3	\$3.32	\$2.	. 92	\$2. 29	\$0.83	1	140	199		130	240
Baker Columbia		7	23	227			4. 63	4.	.40	2. 31		1	156	136		147	
Coos		14		98			2.75			2.58		]	105			106	
Crook				 								ļ					*****
Curry	,	9	12	. 21			3.50	3.	. 69	3.50			48	21		32 .	
Douglas		11	66	60	3		3.00	2.	. 00	2.00		1	200	200		54 .	
Grant		4	7	178	5 - [	1	4.25	3.	. 67	2.46	1.00	1	173	240		152	360
Jackson		3	2	90	)	2	2.67	2.	.50	1.81	0.75	1	190	190		114	180
Josephine		5		114	l		3.00			2.09		[] 1	185 [		-[	137	
Lane			, ,					· <del></del>				[[		• • • • • • • • •			
Linn	1	1			£	•••••	2, 50			2.00		]  8	300	• • • • • • • • • • • •	-	150 .	<i></i>
Malheur				4:	( '			••		2.00					-	108 .	• • • • • • • • • • • • • • • • • • • •
Union		5	22	31		•••••	3, 63	3	. 50	2, 64			118	344		210	
Undistributed gold			• • • • • • • •	61	3				••••	2. 29			• • • •   • •		-	130 .	
					EMPL	OYÉS BI	ELOW GR	OUND.									
	Aver	age nun	iber emp	loyed.	Ave	age wa	ges per d	lay.	Avera	ge numbe durin	er of days g year.	worked	Tota numi			Mines working but not	Number of mines
COUNTIES.	Fore- men or over-	Miners	Labor- ers.	Boys under 18	Foremen or over-	Miners	Labor-	16	Fore- men or over-	Miners	Labor- ers.	Boys under 16	of mine	duć s. mir	ing ies.	pro- ducing.	idle.
	seers.		-	years.	seers.			years.	seers.		0	years.					
Total	22	653	57	1	\$3,92	\$3, 16	\$2,28	\$1.50	194	157	200	40			200	30	55
Baker	3	313 2	34		4. 50	3.46 3.00	2.03		230	160 20	150		' ا	47 2	34	6 1	7
Columbia	7	87			3, 00	2.96			60	91				28	25	3	
Crook	1	2			0.00	3.00	1			. 60			·	1	1 .		
Curry	r i												:	12	6	1	5
Douglas	1				.,		.]		]			]	:	13	5	1	7
Grant	2	109	10		4. 25	2.55	2.38		332	125	230		١.	42	31	6	
Jackson		14		1		2.31		. 1.50		. 188		40	1 -	42	24	6	12
Josephine	1	1				2,00				. 163				48	36	2	10
Lane	1	3			5, 00	4.00			30	30		[ <u>-</u>	ļ ·	2	••••	1	1
Linn		[											l	1		1	į.
Malheur		. <b></b> .					-							23	22		] ]
Union	9	122	13		4. 25	3.19	2.64		273	228	309		1	24	16	2	•
Undistributed gold	l	1		J			.!										

# GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued. ${\it OREGON-Continued}.$

				exp	ENDIT	URES.							VALUE OF	MINING	PROP	ERTY.	The second secon
						Offic	e force	•		o agricultura						All the St Walt billing country, and	
COUNTIES.	Grand tot of expen- itures.		Total wages pai in 1889.	tract.		ales.	F	emales.		ue of olies.	Other expend itures.	l value of	Value of build- ings.	Value railros on su	ds A	fachin- ery.	Under- ground improve-
				ors.	Num- ber.	Wage paid.	Num ber.		3		reares	<b>P I I I I I I I I I I</b>	mea.	face	•		ments.
Total	\$1,604,78	\$970, 758	\$909,001	\$13, 907	28	\$47, 850			. \$549	,745	\$84, 278	\$15, 151, 203	\$684,004	\$28, 6	26 \$	<b>1</b> 86, <b>4</b> 03	\$1,524,368
Baker	<b>3</b> 95, 21	11			9	21, 152			. 86	, 817	11, 634	5, 241, 536 5, 000		21, 2	40	117, 988	477, 723 100
Crook	69, 67	8 54, 458	1	3 [					. 15	, 074 15	146	665, 760	10			15, 330	15, 330
Curry	1	1 4, 365	4, 365 43, 791	i	11	13, 280			Ti i	, 100 , 385	126 33, 000	57, 780 6, 002, 150		5, 5		1, 080 225, 590	9, 759 550, 990
Grant	177, 63 48, 78	4 107, 665	103, 152	698	2	3, 815 1, 898			47,	, 763 , 948	22, 206 757	915, 785 257, 324	4, 082	1, 2	- 1	38, 112 29, 122	171, 620
Josephine	59, 12 91	8 36, 265	36, 265 510	i  . <b></b>	<u>.</u>				11 .	, 126 200	7, 737	579, 073 1, 525	11,766		36 ; 73 ;	33, 496 75	19, 781 95, 593
Linn	2, 50	- 1	2,000				-			500		1,020	100		•••	13	1,000
Malheur	14, 82	18	9, 100	t i			1		∥ .	323	350	123, 200	7 175			4. 025	
Union	263, 57	11	155, 816		5	7, 705	1		1)	494	8, 322	1, 301, 470	11			21, 675	183,471
Undistributed gold	200, 00		200, 000	1 1		1, 103	1		au,	, 454	0, 044	1, 501, 410	96,051			21, 919	183, 471
COUNTIES.	VALUE O	F MINING PRE continued.	OPERTY-	VALUE OF	MILL	OR RED	UCTION	works.	Bo	ilers.	- C	MOTIV	E POWER.		м	otors.	Num- ber of ani-
	Mine supplies.	Mine proper.	Cash.	Total.	Bui ing		fachin- ery.	Sup- plies.	Num- ber.	Hor pow			Other po	wer.	Num ber.	Horse power	mala.
Total	\$93, 116	\$12, 198, 130	\$136, 556	<b>\$1,145,006</b>	\$147,	993 \$	550, 188	\$46, 825	26	8	11	16 1, 796			34	339	126
Baker Columbia	19, 797 5	4, 542, 572 4, 895	1, 947	378, 555	216,	913	144, 650	16, 992	9	3	72	3 297		• • • • • • • • • • • • • • • • • • • •	12	133	58
Crook	11, 242	594, 293	25, 550	· · · · · · · · · · · · · · · · · · ·			• • • • • • • • • • • • • • • • • • • •							· · · · · · ·			
Curry	1, 020	43, 620		• • • • • • • • • • • • • • • • • • • •								•••				-	
Douglas	24, 200	4, 556, 750	88, 000	572,000	176,		374, 000	22,000				• • • • • • • • • • • • • • • • • • • •	Water, 11	• • • • • •	11	1	1
Grant	4, 453	696, 243		78, 589	12,	154	64, 800	1,635	7	Į	13	5 245			7	, , ,	1
Jackson	13, 166	186, 727	2, 184						1	1	10	1 88	Various, 1				1 .
Josephine	8, 780	416, 140	13, 625	5, 232	1,	526	3, 488	218	1		11	1 17	Various, 1	8		-	. 14
Lane	100	250				·!	• • • • • • •		ļ <b>.</b>			•••					
Linn		100 575	E 0=6			••••			3	1	21	3 56		•••••			†·····
	175	106, 575	5, 250	110, 630	41	400	63, 250	5, 980	5	ı	84	3 1,093	Water, 1		3	21	
Union	10, 178	1, 050, 065		T10, 020	41,	±00	uo, 2011	2, 800	1 0	1	.U±	0 1,093	mater, 1		1	5	23

### SOUTH DAKOTA.

COUNTIES.	Total amount of ore pro-	Total amount of ore sold.	Total amount of	ASSAY VALUE	OF ORE SOLD.	тот	AL BULLION VA	LPE.	VALUE OF B	D COINING ULLION PRO- M ORE SOLD.
	duced. (Short tons.)	(Short tons.)	ore treated. (Short tons.)	· Gold.	Silver.	Grand total bullion.	Gold.	Silver.	Gold.	Silver.
Total	963, 820	3, 902	936, 421	\$69, 668	\$116, 793	<b>\$3,</b> 226, 408	\$3, 091, 137	\$135, 331	<b>\$66,184</b>	\$110, 954
Custer						3,500	3, 500			
Lawrence	962, 139	3, 902	934, 740	69, 668	116, 793	2, 991, 889	2, 856, 558	135, 331	66, 184	110, 954
Pennington Undistributed gold	1,681		1, 681			31, 079 200, 000	31, 079 200, 000			

# GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued.

						son	JTH DAI	ATOX	Cont	inued									
COUNTIES.	OF BUL	NING VA LION PRO ORE TRI	DUCED	PLAC	ER BULL	ION.	Total produc-						R OF MINE		DUCING				A C C C C C C C C C C C C C C C C C C C
COMITED	Gold	.   8	Silver.	Gold	ı. Si	ilver.	ing miner reported.	Lien	s than .,000.	1	to 0,000.	\$10,000 to \$50,000	to	)	\$100, to \$250,		\$250,0 to \$500,0		Over \$500,000.
Total	\$2, 795,	458	24, 377	<b>\$29, 5</b>	00		31		12		6		С	3				1	3
Custer  Lawrence  Pennington	2, 790, 5,	374	24, 377	3, 5 26, 0			2 22 7		2 4 6		5 1		6	3				1	3
Undistributed gold									•••••	.				•		••••			
				THE STREET STREET							GROUND.		-			····		erranna ivraniana	
COUNTIES.		Aver	age nun.	ber empl							er day.	······································		nge nu	mber (	of day	s work	ed duri	ng year.
	Foreme oversee		chanies.	Labore	rs.   uno	loys ler 16 ears.	Foremen overseer	or s. Me	ehanic	s. La	aborers.	Boys under years	16 Parem	eers.	Mecha	nies.	Labor		Boys inder 16 years.
Total		31	260	-	54		\$4, 57	7	\$3. 23		\$2.85			272		311		204	
Custer Lawrence		29	253	10	07		4, 61	1	3. 22	1	2.84		4	282		318	:	123 302	· • • • • • • • • • • • • • • • • • • •
Pennington Undistributed gold		2	7	1	94 43	•••••	4.00		3, 50		2.86 2.85			126		49		102 204	· · · · · · · · · · · · · · · · · · ·
		<u>-</u>			EMI	PLOYÉS	BELOW GR	OUND.	name namena, Wilde a							-			
COUNTIES.	Aver	age nun	iber emp	oloyed.	A	rerage v	vages per	day.	A	verag	e numbe durin	er of day ig year.	s worked	Tor num	ber	Numb of pro	- WO		Number of mines
	Foremen or over-seers.	Miners.	Labor- ers.	Boys under 16 years.	Foreme or over seers.	· Mine	rs. Laborers.	Boy und 16 year	ler m	Fore- ien or over- eers-	Miners	Laborers.	Boys under 16 years.	min		ducin mines	z .	pro- icing.	idle.
Total	31	645	369		\$4.75	\$3.4	9 \$2, 99	ļ		299	293	321			48	3	1	8	g
Custer Lawrence Pennington Undistributed gold	30	637 8	367		4. 78 4. 00	t				306 90	296 90	ſ	\$		2 36 10	2	2 7	6 2	8 1
				·	EX	PENDIT	URES.				-			VAL	UE OF	MINING	PROP	ERTY.	
,							Office	e force		1								i	
COUNTIES.	Gran total expend tures	of t	Frand otal of vages.	Total wages paid in 1889.	Paid contra	act-	Males.	Fe	males	0	Value f sup- plies.	Other expend- itures.	Total value of plant.	of	Value build- ings.	of ra	ds or-	achin- ery,	Under- ground improve- ments.
	l		· · · · · · · · · · · · · · · · · · ·	10001		No	Wages paid.	No.	Wag paid	es 1.						fac	е.		
Total	\$2, 589,	383 \$1,	742, 042	\$1, 605, 73	\$120,	1.69	\$16, 135			\$7	21, 139	126, 202	\$5, 271, 11	0 \$1	124, 775	\$8,0	87 \$3	36, 923	\$603.888
Custer  Lawrence  Pennington  Undistributed gold	l .	378	3, 500 503, 875 34, 667 200, 000	3, 50 1, 369, 37 32, 86 209, 00	1 120, 3	169	3 14, 335 1 1, 800			7	19, 929 1, 210	121, 701 4, 501	5, 082, 53 188, 57	- 11	120, 775 4, 000	8, 0	r	12, 468 24, 455	598, 818 5, 670
	VALUE		NG PROP	ERTY—	VALUE O	F MILL	R REDUCT	ION W	ORKS.				MOTIVE	e pow	ER.				
COUNTIES.	Mine supplies		ne per.	Cash.	Total.	Buil			Sup-	Be Num	dilers.	-	gines.	Ot	her po	wer.		otors.	Num- ber of ani- mals.
Total		2 \$4, 140	0, 827	\$19, 148	\$573.774	\$155,	402 \$389.	068 \$5	29, 304	ber.	power 3, 427	ber.	power. 2, 969				ber.		7
Custer		_						-  -											
Lawrence Pennington		158	5,000	19, 148	560, 274 13, 500	15 <del>4</del> ,		008 2	29, 304	. 61 5	3, 287 140	51	2, 936 33	Wa	тег, 1				69
Undistributed gold																			·· <b> </b>

# GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued. TEXAS.

								T	EXAS.									artere en reggio del cris correct		
COUNTIES.	Tota amoun	t of ro-	Tota amount ore sol	of ar	Total nount or	r	Y VAI	LUE OF	ore soli	).	,	TO	TAL BU	LLION V.	ALUE.			VALUE O	)F BU	COINING LLION PRO- ORE SOLD.
	duce (Short t	d.	(Short to			.)	Jold.		Silver.	1	Grand t bullio	otal n.	(	fold.		Silver.	•	Gold	.	Silver.
Total	12,	996	1, 8	155	10, 441		\$7, 18	8	\$86, 968		\$425,	001		\$6,828		\$418,	173	\$6,8	28	\$82, 620
El Paso Presidio		355 641	1, 3		10, 441	- 11	7, 18	38	86, 968			448 553		6, 828		82, 335,	620 553	6, 8	1	82, 620
gar, and the first of the control of	COIND	NG VAL	UE OF	Į.	The second secon		1				A RESIDENCE OF THE PROPERTY OF	year of the second	NUMBE	R OF MI	NES PR	opuce	NO	The state of the s		
COUNTIES.	BULLION	PRODU-		PLA	CER BU	LLION.	du mir	al pro- icing ies re-	Less tha	m	\$1,000	i	\$10,000		,000	\$100		\$250,0	ю	Over
	Gold.		Silver.	Gol	d.	Silver.	po	rted.	\$1,000		to \$10,000	.	\$50,000,	\$100	to 0,000.		,000.	\$500,00	90.	\$500,000.
Total		\$	335, 553			******		5	4	2					1		2			
El Paso Presidio	1		335, 553					2 3		l					1		2		 	
						The state of the s		1	MPLOYÉS	ABC	VE GRO	und.				!	1			THE PARTY OF PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF T
AN PROPERTY OF		Ave	rage num	ber emp	loyed.	····	ii ii		Average	wag	gea per d	lay.		Ave	rage n	umber	of day	s worke	d du	ring year.
COUNTIES.	Foremen overseen	or Me	echanics.	Labore	rs. u	Boys nder 16 vears.	For	emen or erseers.	Mechan	nics.	Labore	ers.	Boys under 1 years.	41707	nien or seers.	Mech	anics.	Labore	rs.	Boys under 16 years.
Total		7	10		36			\$4.62	\$2.	83	\$2.	07			130		174	1.	17 .	
El Paso	i .	1 6	5 5	BAR PER PROPERTY AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON	4 32		<u> </u>	3.00 4.89	1	85 80		50 . 02 .			100 135		193 154	10	1	
				1	E	MPLOYĖ.	s BELO	ow gro	UND.						T	:			L.	
COUNTIES.	Avera	ge nur	nber emp	loyed.		verage	wage	s per d	ay.	Ave	erage nı	ımber uring	r of day:	3 worke	nur	otal nber	Num of p	oer wo	ines king	
	Fore- men or over- seers.	Miners	Labor- ers.	Boys under 16 years.	Foren or ove	er-   Min	iers.	Labor- ers.	Boys under 16 years.	Former over	or Mi	ners.	Labor	Boys unde 16 years	mi r	of nes.	dući mine	ng p	t not ro- cing.	of mines idle.
Total	5	78	192		\$2.6	30 \$1.	27	<b>\$</b> 1. 25		16	53	175	156		_	10		5	1	4
El Paso Presidio	4	60 18	6 186		2. 8			1.10 1.25		19	93 11	193 114	193 155		-	5		2	1	3
Particles - 1 / Anti-Order - March Stands - March S			:	1	EX	PENDITI	IPFS		ļį					<u> </u>	<u> </u>			!		
		1			1	1		co force				-			VAL	UE OF	MINING	PROPE	ery.	
COUNTIES.	Grand total of	Gr	and	Total	Paid to con-	Ms	ales.		emales.	-	alue of	Ot	her	Total	Valu	ue of	Valu			Under-
	expendi- tures.			ges paid n 1889.	tract- ors.	Num- ber.	· · · · · · · · · · · · · · · · · · ·	n Nur	n- Wage	¦SL	ipplies.	expe	endi- res.	value of plant.		ild- gs.	of rai roads o surfac	on er		ground improve- menta.
Total	\$205, 808	\$82	, 586	\$76, 146	\$270	5	\$6, 17	o			\$17, 602	\$105		\$405, 292	 \$7	,900 _		\$9	, 200	\$25,000
El Paso	23, 355 182, 453	1	, 621 , 965	20, 731 55, 415	270	2 3	62 5, 55	<b>#</b>			1, <b>634</b> 15, <b>96</b> 8	105	100 , 520	200, 000 205, 292	- 1	, 200 .		3	200	15, 000
	VALUE O			1	VALUE			<u> </u>	v works.	1								0	, 000	10,000
COMPURA		contin	aued.				J. 112.		WOLLES.		~			MOTIVE	POWE	R.				Number
COUNTIES.	Mine supplies.	Mi proj		lash.	Total.	Buil ing		Machin ery.	Supplies.	Nu	Boilers.	rse :	Engin Num- I ber. p	Iorse ower.	Other	powe	N	Motor	rse	of animals.
Total	\$4, 192	\$357	, 00u   s		\$49, 560	\$10,	600	\$20,000	\$19, 560	<b>-</b>	2	20	2 p	66 .				6		31
El Paso	600	ì	,000				== =			1	2	20	2	66 .			= -			20
Presidio	3,592	179	, 000	2, оно 🖁	49, 569	10,	003	20, 000	19, 560	<b> </b>		-		12	Windl	ass, 1.		6		20 11

Tooele .....

Wasatch....

Washington .....

Undistributed gold

2

2

2

11

5

6

16

13

12

## MINERAL INDUSTRIES IN THE UNITED STATES.

### GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued.

#### UTAH.

						ULAM.							
COUNTIES.	Total amount of ore pro-	Total amount of		t of	AY VALUE	OF ORE SOLD.		T	OTAL BULLI	ON VALUE.		ESTIMATE VALUE OF B DUCED FROM	
	duced. (Short tons.	ore sold. (Short tons	ore trea .) (Short t	0118.)	Gold.	Silver.	Grand bullio		Gol	ld.	Silver.	Gold.	Silver.
Total	214, 548	125, 051	. 64,	818 \$	406, 312	\$6, 373, 380	\$9, 54	4, 680	\$48	67, 666	\$9, 057, 014	\$387,390	\$6, 809, 87
Beaver	12, 942	12, 771		114	54	380, 950	36:	3, 322		327	362, 995	51	361, 90
Boxelder				•••••		••••••	·		· .		• • • • • • • • • • •		
Juab	52, 251	52, 183		••••	224, 333	3, 051, 903	1	2, 422	li .	13, 115	2, 899, 307	213, 115	2, 899, 30
Piute	174	1	•				1	8, 995	11	1, 395	7, 600	1, 395	7, 60
Salt Lake	49,836		t .	1	77, 776	645, 648	₽	7, 263	11	73, 887	613, 376	73, 887	613, 37
Summit	82, 537	i .	1 -	323	92, 941	2, 213, 081	Ti i	9, 083	1)	88, 294	4, 940, 789	88, 294	2, 850, 90
Tooele	12, 595			268	11, 208	79, 693		4, 157	II .	10, 648	113, 509	10, 648	74, 72
Wasatch	1	1	1			2, 105	1	2,000			2, 000		2,00
Washington	4, 113		4,	113		•••••		7, 438	- 11		117, 438	•••••	
Undistributed gold		•					. 10	0, 000	10	00, 000			
	COINING Y BULLION PRO ORE TR	DUCED FROM	PLACER	BULLION.	Total	·			NUMBER (	OF MINES PR	oducing—		
COUNTIES.	Gold.	Silver.	Gold.	Silver.	ing min reporte	es	\$1,000 to \$10,000		\$10,000 to \$50,000.	\$50;000 to \$100,000.	\$100,000 to \$250,000.	\$250,000 to \$500,000.	Over \$500,000.
Total	\$276	\$2, 247, 143			66	3	) 2	21	19	3	7	3	
Beaver	1	1, 093			4		3					1	
Boxelder Juah	į.								•4	2	2	1	
	i				16	1		5	'4	2	2	1	
Piute	t .				)	14	ļ	9	9	1	2		
Salt Lake	1	2, 089, 825			25	11	- 1	1			2 2		
Summit	1	1 ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '			) H	9		2	2		2	1	
Tooele	f .	38, 787	·-·····		10	19	3	3	4				
Wasatch		***************************************	• • • • • • • • • •		2	I	. • •	1					
Washington Undistributed gold	S.	1 11				2	1				1		
	1	[			ļ.	EMPLOYÉS	ABOVE GRO	ound.					
COUNTIES.	A	verage mumb	er employe	1.		Average	wages per	day.		Average n	umber of da	ys worked d	uring year.
•	Foremen or overseers.	Mechanics.	Laborers.	Boys under 16 years.	Foreme overse	en or ers. Mechan	ics. Labo	rers.	Boys under 16 years.	Foremen or overscers.	Mechanics.	Laborers.	Boys under 16 years.
Total	85	171	475	2	\$5.	27 \$3.	93 \$	3.14	\$1.00	307	319	311	36
Beaver		6	5			3.	50	2.69			341	176	
Boxelder		- <i>-</i>  -									.		¦
Juah	54	81	41	<i></i> .	. 5.	39 4.	00 :	3.00		310	327	270	
Piute		[	1					3.00				30	
Salt Lake	10	22	43	2	5.	14 3.	63	2.85	1.00	321	296	279	36
Summit	15	40	189		. 5.	25 4.	14   ;	3. 31		316	353	354	
Manula	9	77	16		1 4	00 3	es i	3.00	1	218	270	302	l

3, 65

4.20

3.50

4.00

4.25

5.00

3.00

2.50

3.00

210

240

218

225

240

185

105

311 .....

### GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued.

UTAH-Continued.

							UIAn-	-Continu	ea.									
p per la dell'accessor del company del control del company del control del con		100 Control of the Co	THE STATE OF THE S	Hard Committee C	EMP	LOYÉS BE	LOW GRO	UND.		A Thursday	And Annual Control of the Control of		nen vinaminen ministra (* 1902.) 1. augustus - Arman Marier, augustus (* 1902.) 1. augustus - Arman Marier, augustus (* 1902.)					pattern and a supple
COUNTIES.	Aver	age numl	ber em	ployed,	Av.	erage was	ges per d	ay.	Avera	ge m	imber e luring	of day year.	ys worked	Total number of	Number of pro-	wo bu	lines rking it not	Number of mines
	Foremen or over-seers.	Miners.	Labor ers.	Boys under 16 years.	Foremen or over- seers.		Labor- ers.	Boys under 16 years.	Foremen or over-seers.	Mi	ners.	Labo era.	Boys under 16 years.	mines.	mines.		eing.	idle.
Total	132	2,065	274	1	\$4.21	\$3.04	\$2.80	\$1.50	279		273	316	200	129	66		26	3
Eeaver Boxelder	1	55 2	13		4. 60	2. 96 3. 00	2.50		341		300 83	341		6 1	4	1	1	
Jaab Piute	1	979 5	81		4.00	3.02	3,00		263		226 80	293		29 8	16 2	1	7	
Salt Lake	15	284	60		4.50	3.06	2.80		311		292	334	1	38	22	1	5	1
Summit	!	613 76	75 24	1	4.77 4.58	3.04	2.88 2.69	1.50	324 293		346 260	354 315	1	22 18	9 10	i	8 2	
Wasatch	4	21	1		4.00	3.50	2.50		225		212	300		3	1	1	2	
Washington	2	30	20		4.50	3.00	2,00		240		240	200		4	2			
Undistributed gold										<u> </u>								
					EXP	Enditure	s.							VALUE OF	MINING	PROPE	RTY.	
		7	***************************************				Office fo	rce.										
COUNTIES.	Grane total o expend tures	tot	and al of iges.	Total wages paid in 1889.	Paid to	ma	les.	Females.	of	lue sup- ies.	Othe exper ture	ıdi-	Total value of plant.	Value of build- ings.	Value of rail- roads or surface	ı er	chin-	Under- ground improve- ments.
•						No.	Vages paid.	o. Wage paid.	В									
Total	\$4, 875, 2	11 \$3,0	22, <b>64</b> 8	\$2,869,85	\$105,55	15 33 \$4	7, 261		\$1,11	1,963	\$740,€	100 <b>(\$</b> 6	63, 009, 466	\$1,229.109	\$138, 378	\$1,01	3,509 \$	22, 111, 81
Beaver	1, 5	54	1,069	1,06	9		•••••			170	3	15	2, 258, 526	37, 170	5, 250	1	, 335	77, 15
Boxelder	1	50	750	50	1	1	250						57, 800	500	0.700	i	, 000	6,00
Juab Pinte	1, 899, 2 3, 2	11	87, 238 2, 157	1, 087, 23 2, 02	1	2	40	•••	541	), 248 794	462, 7	65	26, 339, 052 583, 895	164, 684 6, 452	8, 160 112	1	5,588 577	5, 042, 40 86, 14
Salt Lake	ì	13	28, 916	396, 16	- }	1 1	8, 214		88	351	25, 8		4, 771, 818	25, 251	55, 148	- k	<b>1, 36</b> 0	1, 818, 04
Summit	1 .	11	68, 795	1, 087, 43	9 49, 05	5 21 3	2, 301		60:	2,420	247, 6	12	26, 629, 744	966, 901	62, 472	1	. 821	14, 546, 59
Tooele	200, 2	50 1	52, 779	115, 22		1 4	6, 156		45	3, 710	3, 7	61	1, 538, 136	19, 926	7, 236	5	3, 158	350, 46
Wasatch	35, 6	il	35, 625	35, 62	· F								738, 000	8,000		1		180,00
Washington Undistributed gold	73, 0 100, 0	44	45, 319 00, 000	44, 57 100, 00		8 1	300		27	7, 270		500	92, 495	825		1'	5, 670	5, 00
	100,			1					1						···	1		- <u>-</u> -
	VALUE	of Minin contin		PERTY—	VALUE OF	F MILL OF	REDUCT	ION WOR	KS.				VITOM	E POWER.				- Num-
COUNTIES,	Mine	Min				Build-	Machin	0- 0- 1		Boil	ers.		Engines.	- Other	power.	М	etors.	ber of ani- mals.
	supplies			Cash.	Total.	ings.	ery.	a- Suppl	Nu	ım- r.	Horse power.	Nur ber		- II	power.	Num- ber.	Hors powe	
Total	\$605, 271	\$35,726,	352 \$2	2,185,030	1,445,047	<b>\$4</b> 08, 752	\$857, 2:	28 <b>\$179</b> ,	)67 1	39	4, 525	2	4 2, 82	9		13	41	9 16
Beaver Boxelder	630 300		170 000	8, 813	840	420	31	5	105	3	136							::]
Juah	ì .	1		777, 240						68	3, 196		24	- 11	s, 27			] ;
Piute		1	3	1, 223	1, 217	342	72	. 1	49		3			3		8		
Salt Lake				46, 170	234, 367 , 105, 623	42, 180 346, 540	186, 61 590, 25	1		17 35 .	545	H	7 25 1,82	1.		5	29 12	
Sunmait Fooele	150, 173 10, 476		1 '	351, 584	86, 400	15, 120	1			14	585	1	1	§1				
Wasatch	300, 000	250,														••••		
Washington		. 80,	000		16, 690	4, 150	12, 35	ου :	100	2	60		2 10					
Undistributed gold					*******							1	•• •••				1	1

# GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES—Continued.

counties.	Total amoun	Total amoun of ore sold.	amount	of	VALUE OF	ORE SOLD.	т	OTAL BULLI	ON VALUE.		ESTIMATED VALUE OF BUDUCED FROM	ULLION PRO-
	produced. (Short tons.)	(Short tons.)	ore treate (Short tor	us.)	old.	Silver.	Grand total bullion.	Go	ld.	Silver.	Gold.	Silver.
Total	3, 626	83	36	31 \$2	20, 341	\$38, 354	\$222, 951	\$18	36, 150	\$36, 801	\$19,324	\$36, 93
Asotin							1, 500		1,500			
Kittitas	370		. 35	50			10, 822	:    1	0, 822	. <b></b>		
Okanogan	2, 101	14		9	5, 007	15, 827	20, 157	-	4, 757	15, 400	4, 757	15, 536
Snohomish					316	204	494	.	300	194	300	194
Stevens	-1, 155	69		2   1	5, 018	22, 323	35, 478	:    1	4, 271	21, 207	14, 267	21, 207
Wallawalla	1		.)				2, 500	10	2,500			
Whitman	l						2, 000	18	2,000			<b></b>
Undistributed gold, placer mines.							150, 000	15	50, 000			
COUNTIES.	COINING VA BULLION PROD ORE TRE	UCED FROM	PLACER B	CLLION.	Total produc-		-	NUMBER (	of Mines Pro	oducing—		
COUNTIES.	Gold.	Silver.	Gold.	Silver.	ing mines reported.		\$1,000 to \$10,000.	\$10,000 to \$50,000.	\$50, 000 to \$100, 000.	\$100,000 to \$250,000.	\$259, 000 to \$500, 000.	Over \$500,000.
Total	\$4, 504	\$364	162, 322		70	65	4	1				
Asotin	- <i></i>  -		1,500 .		5	5						
Kittitas	4,500 .		6, 322 .		13	11	2					
Okanogan		364			13	11	2	<b></b>	l			
Snohomish	1				1	1						
Stevens	4 .				23	22		1				
Wallawalla	l		2,500 .		8	8		_				
Whitman			2,000		7	7		•••••				
Undistributed gold, placer mines.			150,000		<b></b>							
		All All and the second				EMPLOYÉS A	BOVE GROUND	•				<u> </u>
COUNTIES.	A	verage number	employed,			Average wa	ges per day.		Average n	umber of da	ys worked d	uring year.
	Foremen or overseers.	Mechanics. L	aborers.	Boys under 16 years.	Foremen overseer	or S. Mechanic	s. Laborers.	Boys under 16 years.	Foremen or overseers.	Mechanics	Laborers.	Boys under 16 years.
Total	3	3	394		\$5.00	0 \$4.00	\$3,00		221	280	139	
Asotin			4 .				3.00				125	
Kittitas			24				2, 69				111	
Okanogan	2	3	19		5.00	0 4.00	3.34		211	280	164	
Snohomish	l											
Stevens	1 .		3		5, 0	0	3.00		240		240	
Wallawalla	] ]		6		1		3.00			1	139	
Whitman			5				3.00				133	
Wnitman Undistributed gold,			333				3.00				130	

# ${\tt GOLD\ AND\ SILVER\ STATISTICS\ OF\ THE\ WESTERN\ STATES\ AND\ TERRITORIES-Continued}.$

### WASHINGTON-Continued.

					EM	PLOYÉ	s rei	OW GR	OUNI	ο,								!		
counties.	Avera	ige num	iber en	iployed.	A	verage	wag	ges per	day.	1	Averag	e nun du	nber	of day year.	ys worked	Total number	Numl of pr	D. V	Mines rorking out not	Number of mines
	Fore- men or over- seers.	Miners.	Labo ers.		Forem or ove seers	r- Mi	ners.	Labor ers.	- u	nder n 16	Fore- oen or over- seers.	Mine	ers.	Laborers.	Boys under 16 years.	of mines.	ducin mine	M	produc- ing.	idle.
Total	8	187	7		\$4.6	9 \$3	. 43	\$3.28			124	13	34	154		86	7	0	7	9
Asotin																5		5		
Kittitas	1	2	1		3.0	0 2	. 50	3.00	į		135	1:	35	135		. 19	1	3	1	5
Okanogan	2	87	6	i	6.0	0 3	. 55	3.33	! !		210	1.	54	157		. 15	1	3	1	1
Snohomish	1	2			4.5	0 2	. 00				30	;	30			3	i.	1	1	1
Stevens	4	96			4.5	0 3	. 37	)			102	1	18			. 29	2	3	4	2
Wallawalla	 															. 8		8		
Whitman																7	Ni .	7		
Undistributed gold,					1			]	1						1	1		.		
placer mines.							•••••													
				And a State of State	EX	PENDIT	URES	j.		774.7		The second				VALUE OF	MINING	PRO	ERTY.	
							C	Office fo	rce.							l I				
counties.	Grand total o expend	f tot	and al of iges.	Total wages paid in	Paid to con- tract-	)	Iales	.	Fer	males.	Va of s pli	up-	Otl expe itur	nd-	Total value of plant.	Value of build-	Valu of rai roads	on 2	Machin- ery.	Under- ground improve-
	tures.	ll wa	iges.	1889.	ors.	Num- ber.			čum- ber,	Wages paid.	11 -		11111		ранс.	ings.	surfac	e.		ments.
Total	\$328, 81	16 \$285	2, 759	\$277, 859	\$2,500	1	\$2,	400			\$35	, 320	\$10,	737 \$	3, 536, 925	\$10,520	\$5	υ0	<b>\$14,</b> 765	\$399, 840
Asotin	1, 50	00	1,500	1, 500			-						.,					_		
Kittitas	11, 86	11	5, 304	5, 304	1				• • • • •		9	235	4,	295	314, 440	2,095	4	00	4.175	50, 640
Okanogan	92, 38	- 12	0, 814	68,414		1	9	400			11	060			1, 558, 565	4, 500		1	7. 185	131, 500
Snohomish	6, 4(	il.	3, 300	3, 300			-	, 200			11	050		50	74, 750	500			56	8, 200
Stevens	62, 17	11	7, 341	44, 841	2,500						11	975	5,8		1, 589, 170	3, 425		00	3, 355	209, 500
Wallawalla	2, 50	f I	2, 500	2, 500	2,000						1		υ, .	~	1,000,110	0, 1-0	_		0,000	200,000
Whitman	2, 00	11	2,000	2,000												1				
Undistributed gold, placer mines.	150, 00	11	0,000	150, 000					<b></b> .											
	VALUE	OF MINE		PERTY-	VALUE (	OF MIL	L OR	REDUC	TION	WORKS					мот	IVE POWER				
COUNTIES.						1			1		-	oilers	8.	Eı	ngines.			1	fotors.	Num- ber of
	Mine supplies	Mii prop		Cash.	Total.	Bu ing	ild- gs.	Mach ery		Supplies	Num ber.		orse wer.	Num ber.		Other p	ower.	Nun		
m . 1	40.000	40. 100		40.000	404 FF0		CEA	417.6		** **	-	-			-				-	╂
Total	\$6,260	\$3, 103	, 040	\$2,000	\$34,550	\$18	, 650	\$11,5		\$4,000			30	2	21	***********	<u></u>	15	81	19
Asotin	330	256	, 800		5, 900	2	, 000	3, 9	900	· · · · · · · · · · · · · · · · · · ·		-	 		-	Water		(	81	12
Okanogan	3,580	1,409		2, 000	28, 650	16	, 650	8, 6	000	4,000	) 2		30	2	21 {	Windlass Whim, 1.		} :		2
Snohomish		. 66	, 000		<i></i>	.					· -					Water				·· <b> </b> · · · · · ·
Stevens	2, 350	1, 370	, 440 .								· <b> </b>				{	Windlass Whims, 2	•	} ;	3	5
Wallawalla Whitman					- <i></i>		 				·	1								·
Undistributed gold, placer mines.							••••			· · · · · · · · · · · ·	.		••••	<b> </b>			• • • • • • •			· <b> </b> ·····

## ${\tt GOLD\ AND\ SILVER\ STATISTICS\ OF\ THE\ WESTERN\ STATES\ AND\ TERRITORIES-Continued}.$

### WYOMING.

counties.	Total amount ore pro		Total	f   amoi	ital int of	ASSAY	VALUE	or oi	RE SOLD.		тот	AL BULLIO	ON VALU	E.			ESTIMATED ALUE OF BUI UCED FROM	LIJON PBO-
00011772251	duced. (Short to	1 .	ore sold. Short tons		eated. tons.)	Gol	lđ.	s	ilver.	Grand bull	l total ion.	Gold	1.	Si	lver.		Gold.	Silver.
Total	1,3	36			890					\$	14, 512	\$14	1, 512					
Albany		25   10			250				•••••		6, 172		3, 172					
Orook Fremont Laramie	7	01 .	· · · · · · · · · · · · · · · · · · ·		640		· · · · · · · · · · · · · · · · · · ·	 	••••••••••••••••••••••••••••••••••••••		8, 340		8, 340					
	COININ BULLION F ORE		ED FROM	PLACI	R BULL	ion.	Tot: prod	al				NUMBER (	F MINES	PROI	oveing			
COUNTIES,	Gold.		Silver.	Gold,	s	ilver.	ing m	ines	Less the \$1,000.	111	,000 to ,000.	\$10,000 to \$50,000.	\$50, to \$100,	9	\$100 to \$250,	ó )	\$250,000 to \$500,000.	Over \$500,000.
Total	\$13, 340			\$1, 17	2			11		7	4 .		1					
Albany	5,000	- 1		1, 17	2			6		5	1		-					
Crook	8,34	)				••••••		5	· · · · · · · · · · · · · · · · · · ·	2	3 .			 				
				EMPLOYÉS ABOVE GROUND.														
COUNTIES.		Ave	rage numl	er emplo	yed.				Average	wages p	er day.		Aver	age nu	mber	of day	s worked di	aring year
	Foremen overseen		echanics.	Laborei	s. j un	Boys der 16 ears.	Foren	ien or ieers.	Mechar	nics. La	borers.	Boys under 16 years.	Forem overs	en or eers.	Mecha	anics.	Laborers.	Boys under 16 years.
Total	1	4	7	5	1		*	3, 86	\$3.	07	<b>\$</b> 2.36			105		56	81	
Albany		- 1	5	3	7			3, 80	2.	70	2.38			111		62	63	
Crook		4	2	1	-	• • • • • • • • • • • • • • • • • • • •		4. 00	4.	00	3.00 2.32 2.00			91		40	35 158 10	
					EM	PLOYÉS	BELOW	GRO	UND.									
COUNTIES.	Avera	ge nu	mber emp	oyed.	A	verage v	wages	per d	ay.	Averag	e numbe durin	r of days <sup>.</sup> g year,	worked	To num	ber	Numb of pro ducin	but not	g   Numbe
	Fore- men or over- sects.	Miner	s. Labor- ers.	Boys under 16 years.	Forem or ove	r- Mine		ibor- ers.	Boys under 16 years.	Foremen or over-seers.	Miners.	Labor- ers.	Boys under 16 years.	min	ies.	mine	ducing	
	10	130	11		\$4.8	4 \$3.0	5 \$2	. 36		80	58	108			56	1	1 41	_
Total	. 13										1	1 00			1			1
Total Albany Carbon	3	57 10 1			4.6	7 2.9 3.9 3.0	20			62	61 68 40	82			15		6 9	

### GOLD AND SILVER STATISTICS OF THE WESTERN STATES AND TERRITORIES-Continued.

WYOMING-Continued.

				EXI	ENDITU	RES.							VALUE OF	MINING P	ROPERT	r.	
						Office	force.										
COUNTIES.	Grand total o expendi	f Grand	Total wages paid in 1889.	trac-	Ма	les.	Fe	males.	Valu of su plie	no ext	ther pend- ires.	Total value of plant.	Value of build-	Value of rail- roads on	Mach ery.	in- g	Inder- round prove
	tures.			tors.	Num- ber.	Wages paid.	Num- ber.	Wages paid.	pite	n,   100	arcs.	piant.	ings.	surface.	•		neuts.
Total	\$80,71	2 \$50,835	\$45,945	\$1,305	5	\$3, 525	1	\$60	<b>\$24</b> ,	193 \$5	, C84	\$2, 361, 017	<b>\$19,745</b>	\$1,600	\$121,5	50 <b>\$</b>	335, 98
Albany	42, 46	9 25, 392	22,702	1, 130	2	1,500	1	60	11. 9	972 5	105	409, 670	7, 850	1, 100	14. 9	Df)	141, 200
Carbon	2, 20	0 1,970	1							30	200	80, 200			1	36	19, 000
Crook	25	0 225	225			<b></b> .				25		11,000	200		į –		1,500
Fremont	25, 63	7 15, 061	12,961	75	3	2,025			10, 3	340	236	1, 070, 147	7. 695	500	105.8	90	109, 612
Laramie	10, 15	6 8, 187	8,087	100		• • • • • • •		ļ	1, 8	526	143	790, 000	3, 150	¦	1	50	64, 670
	VALUE O	of MINING PE		VALUE OF	F MILL (	н кері	CCTION	WORKS.				мотг	E POWER.				Num
COUNTIES.	Mine	Mine			Build	. V-	ehin-		Во	ilers.		Engines.			Mot	ors.	ber of ani-
	supplies.		Cash.	Total.	ings.		enin-	Supplies.	Num- ber.	Horse power			Other	power.		Horse ower.	
Total	\$13, 515	\$1,868,444	\$181	\$130, 575	\$27, 42	5 \$10:	2, 600	\$550	8	378		12 449			7	70	80
Albany	4 885	239, 554	181	30,000	10,00	0 20	0,000 .		3	110		6 207					. 18
Carbon	100	60, 050															
Crook	70	9, 230			. <b></b>						-	·   ·					.{
	8, 075	838, 465		78, 575	7,42	5 70	600	550	4	208		4 177 -	Whim,	wheels.4.	7	70	18
Fremont				11		1	- 1		h t		111		LL imelia	ss. 1	1 1		

### NOTES ON THE CONDITION OF GOLD AND SILVER MINING.

Since the distribution of the production by states has not heretofore been very accurate, it is not possible to draw exact conclusions from a comparison of these figures with the output by states in earlier years, but some general lessons can be learned from them.

In Alabama, and in fact in all the eastern states, the gold production has not increased to any noticeable extent. The ores thus far worked have been chiefly low-grade "free-milling" ores, which have contributed but a small addition to the stock of gold. Since the reduction in the cost of treatment of gold-bearing pyritic ores, effected by improvements in metallurgical processes referred to in another part of this report, it is probable that the eastern states will increase their output, though perhaps not their relative importance as gold-producing states.

# APPALACHIAN RANGE: STATES OF VIRGINIA, NORTH CAROLINA, SOUTH CAROLINA, GEORGIA, AND ALABAMA.

In the states of the Appalachian range the majority of mines are small placer and river mines, producing insignificant amounts of gold. Of the mines listed in these states only 1 produced over \$30,000 worth of bullion in the year 1889, 2 between \$20,000 and \$30,000, 4 between \$10,000 and \$20,000, 6 between \$5,000 and \$10,000, 11 between \$1,000 and \$5,000, and 47 less than \$1,000 each. These 71 mines are distributed among the states as follows: Alabama, 6; Georgia, 22; North Carolina, 31; South Carolina, 7; Virginia, 5. Besides these mines there is a large number of small placers classed as petty mines, the production of which does not reach \$100 each. The original list of names and addresses of mines to which schedules and letters asking for information were sent was so imperfect that only 16 schedules were received by mail direct from the owners of mines. These gave the statistics of the largest producing mines. Arrangements were made with Mr. Stuart W. Cramer, assayer in charge of the United States mint at Charlotte, North Carolina, to undertake a more thorough collection of the statistics of these states than could be done by mailing schedules to the owners of the mines. The following is an abstract from his final report:

All mining that was not properly developing, or that which was so small that the production of bullion did not exceed \$100 in value, has been included as petty mining. This petty mining also embraces the work by private individuals of handling the tailings from the larger mines. This was done so that the tables of cost, etc., would not be in error.

Attention should be called to the fact that certain managers reported (1) their net production, that is, what they get for it from the mint or assay office, not their gross output; (2) others sent their gross output, and (3) still others sent reports of output including petty work done on their property by private individuals, as reworking the tailings, etc., which is here classed as petty work. The figures on the detailed statement are correct, as will be seen by the close comparison with the estimate of the director of the mint (see pages 20 and 21 of the director's report). The data concerning the petty mining are included. This will be found very accurate as an average, though, of course, some localities have produced more and others less than that given. In the work use has been made not only of all the data that could be obtained from mine owners, managers, etc., but of the reports from all the mints and assay offices in detail, and also of all the data collected during a trip of 6 weeks spent in compiling the report on the production of the precious metals for my district; also all the data available from past experience with the section were used. To supplement and verify the foregoing all the important mining centers were visited by the special agent.

PRODUCTION, BY COUNTIES, OF THE APPALACHIAN STATES: NORTH CAROLINA, SOUTH CAROLINA, VIRGINIA, GEORGIA, AND ALABAMA.

COUNTIES.	Mines.	Amount.	COUNTIES.	Mines.	Amount.
NORTH CAROLINA		\$150,674	SOUTH CAROLINA		\$47, 085
Burke	Petty mining	8, 384	Chesterfield	Petty mining	110
Cabarrus	52 mines	15, 500	Chesterfield and Lancaster	1	42,273
Jaoarrus	Petty mining	4, 386	Spartanburg	Petty mining	669
Caldwell	Petty mining	215	Union	do	135
33	ζ1 mine	180	State, miscellaneous		3, 893
Clay and Franklin	Petty mining	1,000			
Cleveland	Petty mining	411		1	
	(3 mines	45, 386	GEORGIA		108, 069
Cleveland, Randolph, and Stanly	Petty mining	1,242			
Davidson	Petty mining	100	Carroll		315
Guilford	do	419	Cherokee, Haralson, and McDuffie	(3 mines	18, 165
Henderson	do	214		Petty mining	698
[redel]	do	98	Dawson	. ]	648
Tackson	do	150	Forsyth	1	130
Lincoln	i e		Habersham	)	895
McDowell	1	1	Hall	do	750
Macon.		1	Lumpkin	ζ7 mines	27, 414
	c3 mines	l .	•	Petty mining	14, 832
Mecklenburg	Petty mining	1 .	Rabun	do	1,041
Montgomery		1	Warren	do	88
Moore				(3 mines	23, 318
Mash		1	White	Petty mining	3, 055
_,		1	Wilkes	do	104
Polk	j.	1	State, miscellaneous		16,618
Randolph	I .	1			•
Rutherford	do				•
Rowan	2 mines		ALABAMA		2, 639
	Petty mining	i		B	869
Union			Clay	1	
Warren		1	Cleburne and Tallapoosa	1 1	777
State, miscellaneous		11,022	State, miscellaneons		1,000

#### VIRGINIA.

The production of this state is so small and uncertain that it is impossible to locate it with any degree of accuracy, and therefore it is simply classified as "miscellaneous".

### ESTIMATES OF COST OF PETTY MINING, ETC., IN VIRGINIA.

Amount of petty mining in bullion yield	30
Total cost of supplies	
Rent, taxes, etc., of the properties worked	
Probable value of the properties	\$50,000
Probable value of the machinery and plant	\$7, 500
Estimated daily earnings of the petty miners	\$0.74
Estimated warly tribute of the property owners	\$1,235
ESTIMATES OF COST OF PETTY MINING, ETC., IN ALABAMA.	
Amount of petty mining in bullion yield	\$2,639
Number of men engaged therein	25
Average number of days worked during the year	100
Average daily earnings of the miners	\$0.75
Probable cost of these operations	\$1,800
Probable value of the properties	\$60,000